

MINUTE ITEM
This Calendar Item No. 59
was approved as Minute Item
No. 59 by the State Lands
Commission by a vote of 2
to 0 at its 11-27-00
meeting.

MINUTE ITEM

59

A 34

11/27/00

PRC 1971.1, PRC 2000.2, PRC 2001.2,
PRC 2002.2, PRC 2003.2, PRC 2004.2,
PRC 2005.2, W 25670 and W 25671

S 17

PRC 8254, 8255 B. Dugal
D. Gorfain

QUESTAR SOUTHERN TRAILS PIPELINE (LESSEE):

Regular Item 59 - Staff gave presentation to Commissioners on the Questar Southern Trails Pipeline. Item was approved by Controller and Department of Finance, with Lt. Governor abstaining.

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CALENDAR ITEM

59

A 34

11/27/00

PRC 1971.1, PRC 2000.2, PRC 2001.2,
PRC 2002.2, PRC 2003.2, PRC 2004.2,
PRC 2005.2, W 25670 and W 25671

S 17

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**ACCEPTANCE OF SEVEN LEASE QUITCLAIM DEEDS AND THE TERMINATION
OF SEVEN GENERAL LEASES – RIGHT OF WAY USE,
THE CERTIFICATION OF AN ENVIRONMENTAL IMPACT REPORT,
AND THE ISSUANCE OF TWO GENERAL LEASES - RIGHT OF WAY USE**

LESSEE/APPLICANT:

Questar Southern Trails Pipeline
PO Box 45360
Salt Lake City, Utah 84145-0433

AREA, LAND TYPE, AND LOCATION:

8.21 acres, more or less, of sovereign lands in the Colorado River, near the city
of Needles, San Bernardino County and six parcels of State school land totaling
40 acres, more or less, located in San Bernardino County.

AUTHORIZED USE:

Use and maintenance of an existing 16-inch pipeline that will be used to transfer
natural gas.

LEASE TERM:

W 25670 – Colorado River Crossing
20 years, beginning December 1, 2000

W 25671 – School Lands
20 years, beginning December 1, 2000

CONSIDERATION:

W 25670 – Colorado River Crossing
\$256 annual rent; with the State reserving the right to fix a different rent
periodically during the lease term, as provided in the lease.

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W 25671 – School Lands

\$9,272 annual rent; with the State reserving the right to fix a different rent periodically during the lease term, as provided in the lease.

SPECIFIC LEASE PROVISIONS:

Insurance for each Lease:

Combined single limit liability coverage of not less than \$5,000,000 per lease.

Bond for each Lease:

\$10,000 per Lease.

OTHER PERTINENT INFORMATION:

1. Applicant has the right to use the lands adjoining the lease premises.
2. The California State Lands Commission (CSLC) authorized the construction of a 16-inch petroleum pipeline in 1957. The seven leases were originally issued to Four Corners Pipeline Company for a period of 49-years each and will expire in 2006. On January 1, 1995, Four Corners Pipeline Company changed its name to ARCO Pipeline Company. The pipeline was used until 1998 to transport crude oil.
3. On April 13, 1999, the CSLC approved the assignment of the seven leases from ARCO to the Applicant effective November 17, 1998. In addition to the request to assign the leases to the Applicant, the Applicant also applied to the CSLC to convert the existing crude petroleum pipeline system to a natural gas system. If approved, the new system would extend from a primary gas receipt point near Bloomfield in northwestern New Mexico, into southeastern Utah, and across northern Arizona and southern California to a terminus in Long Beach, California. In California, the existing pipeline crosses portions of Los Angeles, Orange, Riverside, and San Bernardino Counties. This pipeline system is owned and would be operated by the Applicant.
4. The staffs of the Federal Energy Regulatory Commission (FERC) and the CSLC, federal and state Lead Agencies, respectively, have completed work on a joint Final Environmental Impact Statement/Environmental Impact Report (FEIS/R). The FEIS/R was prepared as required by the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

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5. If approved, the proposed project would transport up to 90 million cubic feet of natural gas per day (Mmcfd) to customers in Arizona, and 120 Mmcfd to customers in southern California. The proposed project requires the conversion of the existing 16-inch pipeline and associated facilities previously used for the delivery of crude oil to natural gas service. To achieve the project purpose, the Applicant must construct pipeline extensions to interconnect with natural gas supply sources, other interstate natural gas pipelines, and end-use customers. In addition, short sections of the existing pipeline must be replaced or realigned/rerouted to meet Federal safety standards for natural gas pipelines. No new construction will take place on the lease premises. Once the pipeline has been successfully converted and hydrostatically tested, the Applicant anticipates that the lifespan of the pipeline would be an additional 50 years with proper maintenance.
6. Pursuant to CEQA and NEPA guidelines, public scoping meetings were held between May 4 and May 13, 1999, in eight communities in California, Arizona, and New Mexico. Issues raised during the scoping and public comment period on the Draft EIS/R included project need, alternatives, permits and regulations, conversion, cleaning, construction procedures, pipeline reliability and operational safety, etc. These and other concerns are addressed in the Final EIS/R.
7. The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and the subsequent release of gas. The Applicant is required to design, construct, convert, test, operate, and maintain the facilities in accordance with Department of Transportation (DOT) regulations in 49 CFR Part 192, "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards", and other applicable federal and state regulations.
8. Considerations of public safety were carefully addressed in the evaluation of alternatives associated with the Del Amo Extension. Input from residents of the Sleepy Hollow community in Long Beach concerning access for emergency response was considered in selecting the new proposed route along Del Amo as the preferred alternative for the pipeline in the Long Beach area, rather than following a route along an existing railroad embankment (and parallel to the Sleepy Hollow community).

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9. In compliance with Condition 12 the FEIS/R, Questar has submitted its Seismological Hazards Evaluation and Mitigation Plan for the Southern Trails Pipeline Project to the CSLC and FERC. This Evaluation and Plan were reviewed by CSLC engineering staff, as well as by the staff of the California Department of Conservation's Division of Mines and Geology. As a result, pipeline system modifications and mitigation measures, designed to reduce the potential impacts of a seismically induced pipeline accident on public safety to the maximum extent practicable, have been incorporated into the project by Questar. These changes, included in Questar's Final Seismological Hazards Evaluation and Mitigation Plan, dated November 17, 2000, are:
- Nine (9) seismically qualified automatic shut-down valves (ASDV) are incorporated into the pipeline and are strategically located in consideration of identified fault zones and known landslide areas. These valves are designed to reduce gas blow-down times, i.e., the time necessary for gas to disperse, in the event of a pipeline accident/release in the populated areas of Southern California;
 - New pipeline segments, particularly in seismically active areas, will incorporate increased pipeline wall thickness;
 - Questar will conduct a smart-pig internal inspection of the pipeline, from the Twenty-Nine Palms Station (Mile Post [MP] 141) to the western terminus of the pipeline, no later than the third year of its operation
10. On July 28, 2000, FERC issued its Certificate of Public Convenience and Necessity (CPNC) to Questar. On September 22, 2000, the U.S. Fish and Wildlife Service, (USFWS) issued its Biological/Conference Opinion (BO) for the project (File No. 1-5-00-F-420), concluding that::
- "After reviewing the current status of the listed species, the environmental baseline for the action area, the effects of the activities associated with conversion of the existing crude-oil pipeline to natural gas service, and the cumulative effects, it is the Service's biological/conference opinion that the proposed project is not likely to jeopardize the continued existence of the desert tortoise, triple-ribbed milk-vetch, lease Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, or arroyo southwestern

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toad, and is not likely to destroy or adversely modify designated critical habitat for the desert tortoise (Chemehuevi unit) or proposed critical habitat for the coastal California gnatcatcher and arroyo southwestern toad."

CLSC staff and staff of the California Department of Fish and Game (CDFG) have reviewed the BO. The CDFG will rely on the FEIS/R in combination with the BO to review and condition its permit pursuant to Section 2081 of the Fish & Game Code to Questar, and monitor future pipeline maintenance activities, with respect to rare, threatened, endangered species and species of concern.

The mitigation measures contained within the FEIS/R and the BO are contained in the Mitigation Monitoring Program for this project.

11. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (Title 14, California Code of Regulations, section 15025), the staff has prepared an EIR identified as CSLC EIR No. 696, State Clearinghouse No. 99041103. Such EIR was prepared and circulated for public review pursuant to the provisions of the CEQA. A Mitigation Monitoring Program has been prepared in conformance with the provisions of the CEQA (Public Resources Code section 21081.6) and incorporated as part of the proposed leases.
12. Findings made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15091) are contained in Exhibit D, attached hereto.
13. A Statement of Overriding Considerations regarding the pipeline's residual significant seismic hazard impact, made in conformance with the State CEQA Guidelines (Title 14, California Code of Regulations, section 15093), is contained in Exhibit F, attached hereto.

SIGNIFICANT LANDS:

This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code sections 6320, et seq.

APPROVALS OBTAINED:

Federal Energy Regulatory Commission

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FURTHER APPROVALS REQUIRED:

United States Environmental Protection Agency
United States Army Corps of Engineers
United States Fish and Wildlife Service
National Marine Fisheries
United States Department of Transportation
Bureau of Land Management
Colorado River Basin Regional Water Quality Control Board
South Coast Air Quality Management District
Mojave Desert Air Quality Management District
California Department of Fish and Game
California Department of Transportation, District 7, District 8, District 9
Orange County Board of Supervisors
Los Angeles County Department of Regional Planning
Riverside County Board of Supervisors
San Bernardino County Board of Commissioners
Port of Los Angeles
Various Municipalities Including: Cities of Anaheim, Banning, Beaumont, Carson, Cerritos, Cypress, Lakewood, LaPalma, Long Beach, Moreno Valley, Orange, and Riverside

EXHIBITS:

- A. Site Map
- B. Lease Description W 25670 Colorado River Crossing
- C. Lease Description W 25671 School Lands
- D. CEQA Findings
- E. Mitigation Monitoring Program
- F. Statement of Overriding Considerations

PERMIT STREAMLINING ACT DEADLINE:

December 18, 2000

RECOMMENDED ACTION:

IT IS RECOMMENDED THAT THE COMMISSION:

CEQA FINDINGS:

CERTIFY THAT AN EIR NO. 696, STATE CLEARINGHOUSE NO. 99041103, WAS PREPARED FOR THIS PROJECT PURSUANT TO THE PROVISIONS OF THE CEQA, THAT THE COMMISSION HAS

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REVIEWED AND CONSIDERED THE INFORMATION CONTAINED THEREIN AND THAT THE EIR REFLECTS THE COMMISSION'S INDEPENDENT JUDGMENT AND ANALYSIS.

ADOPT THE FINDINGS, MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15091, AS CONTAINED IN EXHIBIT D, ATTACHED HERETO.

ADOPT THE MITIGATION MONITORING PROGRAM, AS CONTAINED IN EXHIBIT E, ATTACHED HERETO.

ADOPT THE STATEMENT OF OVERRIDING CONSIDERATIONS MADE IN CONFORMANCE WITH TITLE 14, CALIFORNIA CODE OF REGULATIONS, SECTION 15093, AS CONTAINED IN EXHIBIT F, ATTACHED HERETO.

SIGNIFICANT LANDS INVENTORY FINDING:

FIND THAT THIS ACTIVITY IS CONSISTENT WITH THE USE CLASSIFICATION DESIGNATED BY THE COMMISSION FOR THE LAND PURSUANT TO PUBLIC RESOURCES CODES SECTIONS 6370, ET SEQ.

AUTHORIZATION:

1. ACCEPT SEVEN LEASE QUITCLAIM DEEDS AND THE TERMINATION OF LEASE NOS. PRC 1971.1, PRC 2000.2, PRC 2001.2, PRC 2002.2, PRC 2003.2, PRC 2004.2, AND PRC 2005.2; AND
2. AUTHORIZE ISSUANCE TO QUESTAR SOUTHERN TRAILS PIPELINE OF A GENERAL LEASE - RIGHT OF WAY USE, BEGINNING DECEMBER 1, 2000, FOR A TERM OF 20 YEARS, FOR USE AND MAINTENANCE OF AN EXISTING 16-INCH DIAMETER PIPELINE THAT WILL BE USED TO TRANSFER NATURAL GAS AS A COMMON CARRIER ONLY ON THE LAND DESCRIBED ON EXHIBIT B ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF; ANNUAL RENT IN THE AMOUNT OF \$256, WITH THE STATE RESERVING THE RIGHT TO FIX A DIFFERENT RENT PERIODICALLY DURING THE LEASE TERM, AS PROVIDED IN THE LEASE; COMBINED SINGLE LIMIT COVERAGE OF NO LESS THAN \$5,000,000; SURETY IN THE AMOUNT OF \$10,000; AND

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3. AUTHORIZE ISSUANCE TO QUESTAR SOUTHERN TRAILS PIPELINE OF A GENERAL LEASE - RIGHT OF WAY USE, BEGINNING DECEMBER 1, 2000, FOR A TERM OF 20 YEARS, FOR USE AND MAINTENANCE OF AN EXISTING 16-INCH DIAMETER PIPELINE THAT WILL BE USED TO TRANSFER NATURAL GAS AS A COMMON CARRIER ONLY ON THE LAND DESCRIBED ON EXHIBIT C ATTACHED AND BY THIS REFERENCE MADE A PART HEREOF; ANNUAL RENT IN THE AMOUNT OF \$9,272, WITH THE STATE RESERVING THE RIGHT TO FIX A DIFFERENT RENT PERIODICALLY DURING THE LEASE TERM, AS PROVIDED IN THE LEASE; COMBINED SINGLE LIMIT COVERAGE OF NO LESS THAN \$5,000,000; SURETY IN THE AMOUNT OF \$10,000.

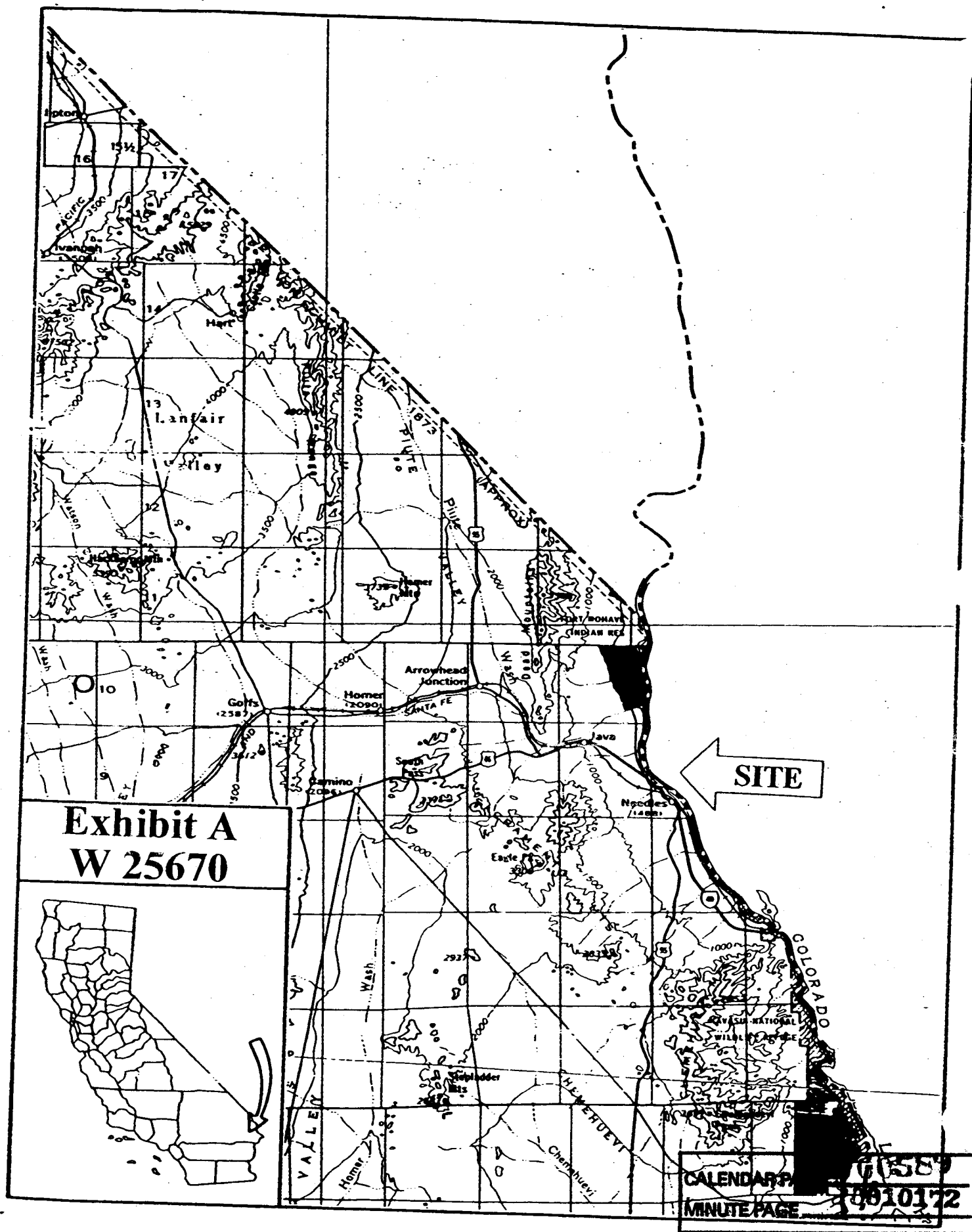


EXHIBIT B

LAND DESCRIPTION

W 25670

A strip of submerged land 100 feet wide, under and across the California portion of the Bureau of Reclamation Channel of the Colorado River approximately 4 $\frac{3}{4}$ miles upstream from the City of Needles, San Bernardino County, California and lying 50 feet on each side of the following described center line:

BEGINNING at a point on the right bank low water line of the Colorado River at U.S. Bureau of Reclamation Engineers Station 914+00; thence N63°17'E across the California Portion of the said Bureau of Reclamation Channel of the Colorado River.

The sidelines of the above described right of way shall be prolonged or shorten so as to terminate in the said right bank of the Colorado River Channel and the boundary of the State of California.

END DESCRIPTION

Revised September 2000 by CSLC boundary staff.

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EXHIBIT C

LAND DESCRIPTION

W 25671

Six State owned Parcels of school land situated in San Bernardino County, California, said parcels more particularly described as follows:

PARCEL 1

A strip of land 60 feet wide, across State owned school land in the East $\frac{1}{2}$ of Section 16, Township 9 North, Range 21 East, S.B.B.M., San Bernardino County, California and lying 30 feet on each side of the following described center line:

BEGINNING at a point on the east line of Section 16, distant southerly 2,323.74 feet from the northeast corner of said Section 16; thence $S60^{\circ}51'55''W$, 102.43 feet to and angle point: thence $S63^{\circ}53'55''W$, 2,820.28 feet, more or less, to a point on the east line of the southwest quarter of said section, distance northerly 1,880 feet, more or less, from the southerly line of said Section 16

The sidelines of the above described right of way shall be prolonged or shorten so as to commence on the easterly line of said section and terminate on the north and south mid section line of said Section 16.

PARCEL 2

A strip of land 60 feet wide, across State owned school land in Section 36, Township 9 North, Range 20 East, S.B.B.M., San Bernardino County, California and lying 30 feet on each side of the following described center line:

BEGINNING at the northeast corner of Section 36; thence $S38^{\circ}17'05''W$, 1,130; thence $S47^{\circ}19'10''W$, 3236 feet; thence $S41^{\circ}00'15''W$, 1,516 feet; thence $S30^{\circ}49'40''W$, 1,180 feet to a point on the south line of said section, which is 575 feet easterly of the southwest corner of said Section 36.

The sidelines of the above described right of way shall be prolonged or shorten so as to terminate on the boundary lines of the said Section 36.

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PARCEL 3

A strip of land 60 feet wide, across State owned school land in Section 16, Township 8 North, Range 20 East, S.B.B.M., San Bernardino County, California and lying 30 feet on each side of the following described center line:

BEGINNING at a point on the north line of Section 16, which is distant easterly 78 feet from the northwest corner of said Section 16; thence S58°27'W, 91.25 feet to a point on the west line of Section 16, which is 48.75 feet southerly of the northwest corner of said Section 16.

The sidelines of the above described right of way shall be prolonged or shorten so as to terminate on the boundary lines of the said Section 16.

PARCEL 4

A strip of land 60 feet wide, across State owned school land in Section 16, Township 7 North, Range 18 East, S.B.B.M., San Bernardino County, California and lying 30 feet on each side of the following described center line:

BEGINNING at a point on the east line of Section 16, distant southerly 1,575 feet from the northeast corner of said Section 16; thence S58°23'50"W, 6,158 feet, more or less, to a point on the west line of Section 16, which is 446 feet northerly of the southwest corner of said Section 16.

The sidelines of the above described right of way shall be prolonged or shorten so as to terminate on the boundary lines of the said Section 16.

PARCEL 5

A strip of land 60 feet wide, across State owned school land in Section 16, Township 5 North, Range 15 East, S.B.B.M., San Bernardino County, California and lying 30 feet on each side of the following described center line:

BEGINNING at a point on the easterly line of Section 16, distant southerly 300 feet more or less, from the northeast corner of said section; thence S43°23'43"W, 1,551 feet; thence S58°45'43"W 1,600 feet; thence S53°28'23"W, 3,400 feet to a point on the west line of Section 16, which is 1,200 feet, more or less, northerly of the southwest corner of said Section 16.

The sidelines of the above described right of way shall be prolonged or shorten so as to terminate on the boundary lines of the said Section 16.

PARCEL 6

A strip of land 60 feet wide, across State owned school land in Section 36, Township 3 North, Range 12 East, S.B.B.M., San Bernardino County, California and lying 30 feet on each side of the following described center line:

BEGINNING at a point on the north line of Section 36, distant westerly 1,960 feet from the northeast corner of said Section 36; thence S31°52'03"W, 6,187.7 feet, more or less, to a point on the south line of said section, 80 feet easterly of the southwest corner of said Section 36.

The sidelines of the above described right of way shall be prolonged or shorten so as to terminate on the boundary lines of the said Section 36.

END DESCRIPTION

Merged September 2000 by CSLC boundary staff.

EXHIBIT D

REQUIRED CEQA FINDINGS QUESTAR SOUTHERN TRAILS PIPELINE COMPANY SOUTHERN TRAILS PIPELINE PROJECT

I. PROJECT DESCRIPTION

The project applicant is proposing to convert an existing crude oil pipeline to natural gas service, construct additional pipeline segments and compressor stations, and operate these facilities as a new natural gas transmission system. If approved, the new system would extend from a primary gas receipt point near Bloomfield in northwestern New Mexico, into southeastern Utah, and across northern Arizona and southern California to a terminus in Long Beach, California. This pipeline system is owned and would be operated by Questar Southern Trails Pipeline Company (QST).

In order to convert the oil pipeline system into one for natural gas service, the Southern Trails Pipeline Project would involve construction of about 65 miles of new, realigned, rerouted, and replaced pipeline, and conversion for reuse of about 675 miles of existing pipeline. Within California, QST proposes to construct:

- one new pipeline extension to interconnect the existing system with gas receipt and delivery points and other regional gas transporters at ARCO's refinery at Long Beach,
- realign/reroute four existing pipeline segments,
- replace a number of short segments of existing pipeline, and
- construct three compressor stations (located at existing pump station sites)

Once completed, these facilities would enable the Southern Trails System to transport 80 to 90 million cubic feet of natural gas per day (MMcfd) to customers in Arizona and 120 MMcfd to customers in southern California.

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A. PIPELINE COMPONENTS AND CHARACTERISTICS

The pipeline and associated facilities would be designed, constructed, converted, tested, operated, and maintained in accordance with the U.S. Department of Transportation (DOT) regulations in 49 CFR Part 192 "*Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards*" and other applicable Federal and state regulations. These regulations are intended to ensure adequate protection for the public and to prevent natural gas pipeline accidents and failures. The Part 192 regulations also represent the primary, minimum pipeline safety standards applied in California. Among other design standards, Part 192 specifies pipeline material selection and qualification, minimum design requirements, and protection from internal, external, and atmospheric corrosion.

Conversion procedures for the existing pipeline would consist of pipeline integrity testing, initial pipeline cleaning, pipeline and associated appurtenances modification, hydrostatic testing, valve installation, and final cleaning. Pipeline integrity testing and initial cleaning have been completed. The pipeline will be hydrostatically tested prior to operation. Where new pipeline and facilities would be required, pipeline construction activities principally would consist of trenching, pipe stringing, hydrostatic testing, valve installation, and final cleaning procedures. Construction techniques would be modified to minimize impacts in urban street and residential areas. QST anticipates that access to all construction and conversion sites in California would be accomplished via existing roads, though these roads may require maintenance and/or upgrading as project planning proceeds.

1. Pipeline Extension

The Del Amo Extension would be approximately 6.6 miles in length and would extend the existing pipeline from a point that previously served as an interconnect to the west Hines Refinery in Lakewood to the ARCO Watson refinery in Long Beach. The new 20" steel pipeline would be buried within city streets, industrial areas, and residential areas using urban construction techniques. The associated metering station would be built within the existing ARCO Watson Refinery.

The route of the extension would travel west along Del Amo Boulevard to the east embankment of the Los Angeles River floodway, where the pipeline would traverse the Los Angeles River along a new bridge to be built adjacent to, and immediately down the river from the existing railroad bridge. The new bridge is being designed specifically to accommodate this and several other pipelines. A thrust bore would be used to construct under the Long Beach Freeway and would continue westward along Dominguez Street, Santa Fe Avenue, Wardlow Street, and 223rd Street. Thrust bores would be required to pass underneath some major streets and railroad yards. A suspension bridge to suspend the pipeline would be built across the Dominguez Channel. Once across the channel the pipeline would connect to the existing ARCO Watson Refinery.

2. Reroutes and Realignment

Two reroutes are proposed in California, the City of Orange and the Cabazon Reroutes. A reroute involves constructing a new segment between two points on the existing pipeline within a new right-of-way (ROW) and abandoning the existing pipeline in place. In California, the proposed reroutes would range from a few hundred feet to several thousand feet away from the original pipeline ROW. The City of Orange Reroute would consist of a 1.1-mile segment, while the Cabazon Reroute would be 8.5 miles in length.

The City of Orange Reroute would be confined to Orange-Olive Road and Lincoln Avenue roadbeds.

The Cabazon Reroute would be constructed adjacent to an existing railroad bed using typical open-country construction methods. The reroute would be required since an agreement acceptable to the Morongo Band of Mission Indians (Morongo) has not been reached. The Morongo may require removal of the existing pipeline across their reservation if formal abandonment occurs.

Two 150-foot long realignments would be required near Corona, California to minimize residential encroachment. A realignment involves constructing a new segment of pipe 5 to 20 feet laterally from the existing pipeline's current position within the ROW to avoid residential encroachment. The existing pipeline would be abandoned in place. To minimize potential impacts in residential areas, the construction area and equipment used would be smaller than in typical open-country construction areas.

3. Replacement Segments

Fifteen replacement segments less than 0.5 miles in length each would occur in San Bernardino County, California. Replacements in this desert area include areas where the existing pipe would be removed and replaced in the same location, or left in place and replaced in an adjacent, parallel trench. Construction would use typical open-country construction techniques.

4. Excavation Sites

The proposed project includes 152 excavation sites in California along the existing pipeline ROW where construction activities would consist of one or more of the following activities:

- the removal of crude oil-related equipment (mainline block valves and taps);
- repairs to minor pipeline defects; and
- installation of temporary facilities to allow the pipeline to be hydrostatically tested.

Excavation sites are relatively small, averaging 50 feet by 100 feet. Construction equipment and methods would vary, depending on the site-specific activity.

B. MAINTENANCE AND REPAIR

Once the pipeline system has been fully tested and service commences, operation and maintenance activities conducted by QST would be similar in many ways to the activities previously conducted by ARCO. Routine operation, maintenance, and repair activities would be conducted all along the pipeline system. Maintenance activities would range from those that result in no (or no new) surface disturbances (e.g., aerial inspections, replacing pipeline markers) to those requiring substantial surface disturbance and extending beyond the permanent ROW (replacement of pipeline segment due to washout, corrosion damage, pipe recoating, or other serious pipeline damage).

The pipeline would be maintained, operated, and inspected under state and Federal standards and regulations. QST's pipeline system would be regularly monitored and visually inspected to ensure public safety and to facilitate effective operation of the pipeline. Patrol frequency would vary between once and four times per year, depending on the size of the line, operating pressure, class location, terrain, weather, and other relevant factors. External corrosion control measures would include a protective coating on the exterior of the pipe as well as application of cathodic protection systems, unless a corrosive environment was proven not to exist. Pipeline operations would be continuously monitored by a supervisory control and data acquisition (SCADA) system, which would allow remote shutdown of all compressor stations and nine automated line break valves between Long Beach and Yucca Valley.

C. ABANDONMENT

The anticipated lifespan of the converted pipeline is 50 years. QST has not identified any additional future plans for system expansion or interconnection with other pipelines. Abandonment of the Southern Trails System at the end of its useful life would likely involve evacuating the natural gas, filling the pipeline with an inert gas (nitrogen), capping the line where required, and abandoning the pipeline in place. Aboveground facilities (valves, compressor stations, meter stations) would be decommissioned and removed from the ROW or compressor station sites. Additionally, QST would be required to obtain additional authorization from the Federal Energy Regulatory Commission (FERC) and the California State Lands Commission (CSLC) to abandon any or all of its facilities.

II. THE RECORD

The California Code of Regulations, Title 14, Section 15091 (b) requires that the Lead Agencies' findings be supported by substantial evidence in the record. Accordingly, the Lead Agencies' record consists of the following:

1. Documentary and oral evidence, testimony, and staff comments and responses received and reviewed by the Lead Agencies during information workshops, public review, and the public hearings on the project (see section 1.3.2 of the Final Environmental Impact Statement/Report [FEIS/R]).
2. Comments received at public scoping meeting held in the communities of Norco (Corona), Banning, Anaheim, Orange, and Long Beach.
3. The Southern Trails Pipeline Project Final Environmental Impact Statement/Report, as certified by FERC on July 25, 2000.
4. Application and supporting materials for the proposed project submitted by QST.
5. Supporting materials submitted by QST on alternate project routes evaluated in the FEIS/R Alternatives section.
6. Biological/Conference Opinion for QST's Southern Trails Pipeline Project, Southern California, Arizona, and Utah, FERC Docket No. CP99-163-000, issued by the U.S. Fish & Wildlife Service on September 22, 2000 (File No. 1-5-00-F-420).
7. Final Seismologic Hazards Evaluation and Mitigation Plan for Southern Trails Pipeline, Earth Consultants International and SPEC Services, revised, November 17, 2000.
8. Matters of common knowledge to the Lead Agencies considered, such as:
 - The California Environmental Quality Act (CEQA) and the State CEQA Guidelines;
 - Relevant adopted policies and regulations of the U.S. Fish and Wildlife Service (USFWS) and the U.S. Corps of Engineers;
 - Adopted policies and regulations of the California Department of Fish and Game (CDFG); and
 - Adopted policies and regulations of the CSLC.

III. CEQA FINDINGS FOR PROJECT IMPACTS

The following section contains the findings required by section 21081 of the California Public Resources Code (Section 15091, State CEQA Guidelines). These findings are organized by resource issue area, with impacts that result from the project as a whole or a combination of all project components contained at the end of the section. The organization of this section is as follows, and reflects the organization of the July 2000, FEIS/R for the Southern Trails Pipeline Project:

ENVIRONMENTAL IMPACTS

- IV.A. Geologic and Seismic Hazards
- IV.B. Soils
- IV.C. Water Resources
- IV.D. Vegetation, Wildlife, and Fisheries
- IV.E. Threatened, Endangered, and Special Status Species
- IV.F. Wetlands
- IV.G. Land Use
- IV.H. Cultural Resources
- IV.I. Noise
- IV.J. Transportation and Traffic
- IV.K. Safety System Reliability and Safety

Each impact of the project is subsequently set forth, followed by mitigation measures, a description of the residual impact after the mitigation has been implemented, alternative discussion, cumulative discussion, the appropriate finding(s) for the impact, and facts supporting the finding.

IV. FINDINGS

A. Geologic and Seismic Hazards

Impact: GEO 1 – Mineral Resources

Construction activities at excavation sites at MPs 30.75 and 31.11 in California could conflict with quarry operations.

Mitigation Measure

GEO/mm-1 - Prior to construction, QST would consult with the quarry operator to develop a cooperative agreement which specifically defines the construction area, expected construction duration, construction access, and restoration plans (see FEIS/R section 5.1.2, Mineral Resources).

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – Construction activities within the quarry are necessary to repair portions of the existing pipe. The pipe must be replaced in order to comply with regulatory standards. Rerouting of the existing pipe would be more disruptive to a larger area and for a longer duration.

Cumulative Discussion – The potential impact is location-specific and is not considered a cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

Facts Supporting the Finding – A work agreement will be implemented to ensure compliance and avoid conflicts between QST and the quarry owner.

Impact: GEO 2 – Paleontological Resources

Construction activities could result in damage or disturbance to vertebrate and invertebrate fossils in California and New Mexico that are considered to have scientific importance by land management agencies.

Mitigation Measure

GEO/mm-2 - QST has developed a Paleontological Resources Mitigation Plan (PRMP), as described in FEIS/R Section 5.1.2, Paleontological Resources.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – Although there would be the potential for disturbance of previously undiscovered paleontological resources, the majority of construction activities would occur in previously disturbed areas. Compliance with the PRMP would ensure that any potential impacts would not result in a significant cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

Facts Supporting the Finding – As discussed in the FEIS/R, consultations with resource agencies and state museums have been conducted and the PRMP has been approved by the Bureau of Land Management (BLM) and other appropriate agencies.

Impact: GEO 3 – Geologic Hazards

Earthquakes in California could potentially damage the pipeline, however, design standards minimize the risk.

Mitigation Measure

GEO/mm-3 - QST is required and has certified that it would design, construct, test, operate, inspect, and maintain its facilities in accordance with the DOT safety standards (see regulations in 49 CFR Part 192, Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards).

GEO/mm-4 - The FEIS/R required and QST has submitted a Seismologic Hazards Evaluation and Mitigation Plan (SHEMP) which includes:

- site-specific seismic hazard investigations at each of the 24 fault zones crossed or paralleled by the existing pipeline and pipeline modifications, including the Del Amo Extension, to reduce seismic related impacts, including liquefaction and landslides, on the pipeline in these areas; and*
- a timetable for implementation of the SHEMP report recommendations before pipeline operation.*

GEO/mm-5 - QST would install "seismically qualified" automatically actuated line break valves as follows:

<u>Valve No.</u>	<u>Mile Post</u>
2	DA-2
4	10.54
6	22.40

8	37.98
10	53.43
16	98.32
18	120.00
19	127.70
20	140.42

The Long Beach Extension will be constructed with 20" dia X .312" wt API 5L X56 line pipe from approximately MP DA-0 to MP DA-2 and from MP DA-3.25 to DA-6.5. The section across the Newport Inglewood Fault area including the existing schools on Del Amo Blvd., the 710 Freeway, the LA River, and Blue Line Rail from approximately MP DA-2 to MP DA-3.25 will be constructed with 20" dia X .375" wt API 5L X60 line pipe.

The Orange/Olive re-route from approximately MP 20.60 to MP 21.75 relocation will be constructed with 16" dia X .375" wt API 5L X56 line pipe.

The Cabazon Relocation will be constructed with 16" dia X .312" wt API 5L X56 line pipe from approximately MP 86.7 to MP 87 and from MP 87.5 to MP 93.5. the section of pipeline adjacent to the San Gorgonio Pass Fault from approximately MP 87 to MP 87.5 will be constructed with 16" dia X .375" wt API 5L X56 line pipe.

No later than the end of the third year of operation, QST will conduct an internal inspection of the pipeline using a smart pig from the Twenty-Nine Palms Station (approximately MP 141) to the west terminous of the pipeline at the ARCO Watson Refinery.

Where the installations described above differ from FERC's project approval of July 28, 2000, QST will obtain written approval from the FERC prior to finalizing its design specifications for the proposed project.

Residual Impacts – Even if the pipeline is designed to the best available engineering standards at a major active fault crossing, the possibility of pipeline rupture as a result of fault displacement or a landslide during an earthquake cannot be completely eliminated. In populated areas, the impact would remain significant after mitigation.

Alternative Discussion – Demand for natural gas in southern California and the southwest United States continues to increase and additional capacity would have to be constructed to serve these areas or end users may need to switch to other sources of energy. Regardless of the specific project, transportation of natural gas into southern California cannot avoid crossing many active faults. All pipelines crossing active faults are subject to potential earthquake damage.

Cumulative Discussion – Potential geological and seismic hazards are location-specific to the extent that they may result in significant impacts on the environment, and they are not "cumulative" in the sense normally applied in CEQA documents. Should a

rupture of the pipeline occur due to an earthquake, cumulative impacts may result from the simultaneous rupture of other nearby pipelines.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – The evaluation of the potential seismological hazards at each of the 24 fault zone crossings along the pipeline was used to refine site-specific design considerations and modifications along the existing pipeline and the proposed new pipeline segments. These site-specific investigations were designed to: 1) reduce the chance of pipeline failure at each of the fault zones by examining site-specific geologic conditions; 2) refine engineering design of the pipeline consistent with site geology; and 3) minimize any potential release of gas from any pipeline rupture. The modifications, described as mitigation measures, exceed minimum Federal DOT standards and are designed to maximize public health and safety.

The study plan for these investigations incorporated voluntary seismic guidelines as provided by Sempra (Southern California Gas, a California utility). A California Certified Engineering Geologist and a California Registered Engineer have certified the findings of the studies. The findings were subsequently evaluated by engineering staff of the California State Lands Commission, in conjunction with ENSR and the California Division of Mines and Geology. This information was used to determine the final engineering design of the pipeline and placement of the automatic line-break shutoff valves in consideration of the identified fault zones.

The addition of the 9-automatic shut-down valves, strategically located with respect to the active fault zones, is designed to enable shorter segments of pipeline, in higher risk seismic areas, to be isolated quickly in case of a break in the pipeline. While a crew may take up to one hour to close a manual block valve, the automatic valves will self-activate in 15-30 seconds and shut down when they sense a drop in pressure. This action would substantially reduce the amount of gas that would enter the atmosphere and therefore the blow down time, i.e., the amount of time necessary for the gas to dissipate and become nonflammable.

The blow-down times for QST's pipeline in the populated (Class 3) areas along the pipeline will be between 2 minutes at the Newport-Inglewood Fault Zone crossing, to 10 minutes at the Chino fault zone. In comparison, the Southern California Gas Company considers 30-45 minutes as an acceptable blow down time for Class 3 areas. A PG&E line on which a pair of automatics valves are installed across the San Andreas Fault,

would shut down within 30 minutes for a pipeline leak, or 10 minutes in the event of a complete line break.

Increasing the wall thickness of new pipeline segments will increase their structural strength and ability to withstand stress caused by ground-shaking, earth movement and liquefaction. This mitigation measure was applied in several locations, such as along the Del Amo Extension, near schools, a liquefaction zone which includes the Los Angeles River Channel, and a heavily used transportation corridor. An automatic shut-down valve is also strategically placed just upstream of this area to minimize the potential public safety hazard.

QST conducted an internal inspection of this pipeline shortly after acquiring it and has maintained the cathodic protection system to control external corrosion. The additional internal inspection of the pipeline, using a smart pig no later than the third year of operation, will verify that the pipeline remains in good condition after its conversion from an oil to natural gas pipeline.

Impact: GEO 4 – Geologic Hazard

The 1999 Hector Mine Earthquake could have damaged the existing pipeline.

Mitigation Measure

GEO/mm-6 - QST would hydrostatically test the entire pipeline (as required by the DOT regulations) to ensure its integrity prior to introducing natural gas and file a report to the Director of the OEP and CSLC. If hydrotesting reveals any damage to the pipeline in this area, QST would prepare a remediation plan to repair the pipeline and to minimize potential damage from future seismic activities near this fault (See FEIS/R section 5.1.2, Geologic Hazards). Specifically, if a failure occurs, QST would file with the FERC Secretary a site-specific repair and remediation plan for each failure, including:

- a plot plan identifying all areas of disturbance associated with the failure and the proposed repairs;*
- a description of the repair activities, and a statement demonstrating how QST has complied with each requirement of FERC's regulations at 18 CFR 157.206(b); and*
- all Federal, state, or Tribal environmental clearances necessary to conduct the proposed repair and remediation activity.*

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – Alternative methods, such as an internal “Pipetronix-type” inspection, could be used to evaluate potential damage. However, pipeline integrity is most reliably determined by conducting a hydrostatic test of the pipe. DOT requirements are not met until pipeline integrity is demonstrated by hydrostatic testing. Pipeline integrity would be demonstrated upon completion of construction and prior to operation.

Cumulative Discussion – This impact is location-specific and is not considered to contribute to any cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – The FEIS/R require additional evidence to ensure that impacts will be reduced to a less than significant level. To accomplish this goal, the entire pipeline will be hydrostatically tested prior to initial operation in accordance with Federal safety standards to ensure pipeline integrity. In accordance with DOT regulations, hydrostatic test pressure will range from 1.25 to 1.5 times the pipeline’s maximum operating pressure in each test section. Any pipeline segments that fail hydrostatic testing will be replaced following procedures for pipeline replacement and retest to ensure pipeline integrity.

B. Soils

Impact: SOILS 1

Construction activities would disturb soils, which could result in temporary increased erosion and reduced soil productivity along portions of the Danby-Ward Valley Replacements and Cabazon Reroute.

Mitigation Measure

SOILS/mm-1 - Prior to construction, QST would submit a list by MP of all areas having steep slopes (greater than 33 percent) and identify the seed mix and the recommended planting time, as described in FEIS/R Section 5.2.2, Erosion. In the absence of seeding recommendations from the land management agencies or Natural Resources Conservation Service (NRCS), QST would seed all disturbed areas within 6 days.

SOILS/mm-2 - QST has adopted the FERC’s Upland Erosion Control, Revegetation, and Maintenance Plan (FERC’s Plan), which requires post-construction monitoring to assure revegetation success.

SOILS/mm-3 - For construction and access through steeply (in excess of 30 percent) sloped areas and within sand dunes, QST would prepare site-specific plans as described in FEIS/R Section 5.2.2, Erosion, prior to construction.

SOILS/mm-4 - QST would implement both short- and long-term erosion control measures, as outlined in their Storm Water Pollution Prevention Plan, Blanco TransColorado, and FERC's Plan.

Residual Impacts – Implementation of the above mitigation measures would reduce the impact to a less than significant level.

Alternative Discussion – As discussed in FEIS/R Section 5.2.2, *Construction Impacts and Mitigation*, QST requested waivers regarding the timing of seeding following final grading. Their request to delay the seeding was primarily based on concerns regarding recommended seeding dates, as well as the placement of construction equipment and seeding machinery.

Cumulative Discussion – This potential impact is location-specific and is not considered to contribute to any cumulative impact, provided that reseeded is successful.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – Overall, erosion impacts from project construction would be minor, except in those locations where soil is particularly susceptible to erosion. Soils susceptible to erosion occur along portions of the Danby-Ward Valley Replacements and Cabazon Reroute. Erosion-control techniques would follow best management practices and be coordinated with the appropriate Federal, state, and local agencies. The following techniques would be used for erosion control: water bars, terracing, diversion ditches, berms, trench breakers, and ditch plugs. Outfall from the temporary slope breakers would be directed toward a stable, well vegetated area. Temporary sediment barriers, such as silt fences, straw bales, or sand bags, would be used at the base of slopes adjacent to road crossings. Mulch also would be applied as a temporary erosion control. Permanent erosion control (i.e., slope breakers) would be constructed as specified in FERC's Plan (FEIS/R appendix B-1, section VI.B.2).

Although QST requested a deviation from FERC's Plan for reseeded, it is most practical to seed disturbed areas while the construction equipment is still nearby in the event that

problems are encountered during seeding that might require the use of heavy equipment. Also, QST has committed to using plants native to each location for revegetation.

Impact: SOILS 2

Construction activities along the existing pipeline could encounter oil-contaminated soil.

Mitigation Measure

SOILS/mm-5 - Although ARCO retains the responsibility for reclaiming or mitigating sites where oil contamination has occurred during operation of the pipelines in crude oil service. QST would be responsible for any oil or hazardous materials spilled during the conversion of the system. Contaminated soil would be excavated and transported to an approved disposal facility.

SOILS/mm-6 - QST has prepared a Hazardous Materials Management and Spill Prevention and Countermeasure Plan (HMMSPC Plan) to avoid or minimize the potential impact of a hazardous material spill and other aspects of handling, transporting, storage, and disposal of hazardous materials. In particular, QST's HMMSPC Plan describes procedures that QST would implement if unexpected or unknown contaminated sites were encountered during construction.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – Soil contamination is location-specific and would not be expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

Facts Supporting the Finding – Data supplied from QST indicates that a legal agreement that addresses the issue of reclaiming or mitigating oil-contaminated sites currently exists between ARCO and QST. QST would be responsible for any oil or hazardous material spilled during the conversion of the system. The pipeline was cleaned once by ARCO and filled with inert gas prior to sale to QST. QST would clean the pipeline again prior to replacing pipe sections and installing new valves. The pipeline would be cleaned with a cleaning train. This train would consist of a series of mechanical, brush, and sealing pigs (pigs are devices that travel inside the pipeline that would be propelled by pressurized inert gas). In addition to the pigs, cleaning solvents and corrosion inhibitors would be included in the cleaning train to remove remaining oil and other debris inside the pipeline. Because the cleaning process would precede the

pipeline replacement and valve installation activities, and because cleaning materials and wastes would be discharged into storage tanks at Red Mesa, Utah, it is not expected that crude oil or other cleaning materials requiring special disposal management would remain in the pipeline. It is possible that there may be accidental spills of oil and hydraulic fluids during pipeline conversion activities. Soils contaminated by such accidental spills would be excavated and sent to an approved disposal location in accordance with this mitigation measure.

Impact : SOILS 3

Significant soil erosion could occur in construction areas where mulching rates are insufficient.

Mitigation Measure

SOILS/mm-7 - QST would use a minimum of 2 tons of mulch per acre, unless written recommendations to do otherwise are received from the NRCS, BLM, NNDNR/AD, or the land managing agency (see the FERC's Plan in the FEIS/R). See FEIS/R section 5.2.2 and appendix B-1.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – QST requested a reduction from the FERC-recommended mulching rate (≥ 2 tons per acre) to 1 ton of mulch per acre. Based on consultations with NRCS district conservationists in southwestern San Bernardino County, we believe that QST has not demonstrated sufficient justification to deviate from the FERC Plan requirements.

Cumulative Discussion – This impact was not identified as significant and would not contribute to any cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – The FERC Plan requires a mulch rate of 2 tons per acre on all dry, sandy sites and on slopes greater than 8 percent (see FEIS/R appendix B, page B-1-7). In a letter to QST dated November 16, 1999, the Natural Resource Conservation Service (NRCS) district conservationist at the Apple Valley Field Office stated that a minimum of 2 tons of mulch per acre should be used. The NRCS district

conservationist at the Redlands Field Office also recommended that 2 tons per acre of mulch be used. The Redlands office went on to say that in California, the NRCS recommends 2 tons of mulch per acre as the minimum mulching rate. After consulting with these two NRCS offices in southwestern San Bernardino County, California, insufficient justification has been presented by QST to warrant deviation from the requirements of the FERC Plan.

Impact: SOILS 4

Construction activities at 5 excavation sites (MPs 198.48, 200.17, 217.30, 219.40, 220.20) in San Bernardino County, California could result in hazards to construction workers, since they are located within unexploded ordnance areas.

Mitigation Measure

SOILS/mm-8 - Prior to construction, QST would prepare an Unexploded Ordnance Work Plan (UOWP) that addresses worker safety in areas identified as having unexploded ordnance. This plan would include an evaluation potential risk and, if warranted, procedures QST would use to minimize risk including, but not limited to, having the areas swept by an Army National Guard Explosive Ordnance Disposal Unit. Plot plans showing all areas of potential risk evaluated would be included in this plan. See FEIS/R section 5.2.2, Erosion.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – Unexploded ordnance is location-specific and would not be expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

Facts Supporting the Finding –The general locations of areas potentially containing unexploded ordnance were identified from USGS land status maps. The FEIS/R requires that QST prepare an Unexploded Ordnance Work Plan (UOWP) that addresses worker safety in these areas. In order to prepare such a plan, QST will have to determine the potential risks in each area. If the risk is high that unexploded ordnance could be encountered during construction in any given area, QST will have that area swept by an Army National Guard Explosive Ordnance Disposal Unit prior to construction. This will assure worker safety with regard to unexploded ordnance in those areas where unexploded ordnance could exist. The UOWP also will include documentation of all steps

that QST takes to determine risk at each location, as well as the results of any ordnance sweeps that may prove necessary.

C. Water Resources

Impact: WATER 1 – Groundwater

Potential impact from the pipeline cleaning process on groundwater resources.

Mitigation Measure

WATER/mm-1 - Prior to construction, QST would submit an Environmental Operating Procedures (EOP) Manual that would detail all waste management procedures for spill containment, cleanup, emergency operations, preparedness, and prevention. The EOP also would identify:

- *the amounts and types of cleaning chemicals that would be used during the pipeline cleaning operation;*
- *how all chemical components of the cleaning train would be stored before use and handled after use; and*
- *how all wastes collected from the pipeline during the cleaning operation would be sampled, separated, stored, transported, and recycled or disposed of. See FEIS/R section 5.3.1.2.*

QST would file this information and its final EOP manual with the FERC and the CSLC for review and written approval by the Director of OEP prior to construction.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – The impact is location-specific and would not be expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – The FEIS/R requires additional information to be provided to the FERC and the CSLC to allow the evaluation of cleaning chemicals selected for use, their storage, use, and disposal; and the collection and disposal of all other wastes accumulated during the cleaning of the pipe.

Impact: WATER 2 – Groundwater

Vehicle refueling and storage of fuel, oil, and other fluids could potentially contaminate groundwater by exceeding Federal, state, and Tribal water quality standards or water quality objectives.

Mitigation Measure

WATER/mm-2 - QST prepared its Hazardous Material Management and Spill Prevention and Countermeasure Plan (HMMSPC Plan) to assemble preventative and mitigative measures that would be used to avoid or minimize the potential impact of a hazardous material spill on groundwater quality. QST's HMMSPC Plan includes:

- *fueling restrictions;*
- *designation of storage, refueling, staging, and lubrication locations prior to construction;*
- *notification procedures;*
- *cleanup and disposal actions;*
- *typical fuel, lubricants, and other hazardous materials that may be used or stored in designated areas; and*
- *the types of containers that would be used for storage.*

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternatives suggested.

Cumulative Discussion – The impact is not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the

finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – QST has already prepared a HMMSPC Plan (FEIS/R appendix C-2) to minimize the potential impact of a hazardous material spill that could adversely affect groundwater quality. Additionally, QST has agreed to prohibit refueling activities and storage of hazardous materials within at least a 200-foot radius of all private wells and within a 400-foot radius of all municipal or community supply wells. Specifically, QST's HMMSPC Plan identifies procedures to minimize the chances of a spill and, if a spill occurs, identifies techniques to contain and remove contaminated soil. This plan is intended to comply with and complement existing regulations pertaining to the safe use of hazardous materials. Persons responsible for handling hazardous materials for this project will be trained in the proper use and management of the materials and will be familiar with applicable laws, procedures, and best management practices related to them.

Impact: WATER 3 – Groundwater

Water supply wells in proximity to pipeline construction activities could potentially be damaged by construction or contaminated by fuels or other hazardous materials used during construction.

Mitigation Measure

WATER/mm-3 - Prior to construction, QST would submit the location by MP of all wells and springs within 150 feet of all construction work areas. For each, QST would:

- conduct pre- and post-construction water quality and yield testing of wells used for drinking water within 150 feet of the construction work areas;*
- communicate with the nearby well owners to determine changes in yield and discoloration during construction;*
- provide a temporary potable water supply to well owners whose supply was adversely affected by construction; and*
- repair or, if necessary, replace any municipal or domestic wells located within 150 feet of construction areas that are damaged by construction. See FEIS/R section 5.3.1.2.*

WATER/mm-4 - QST would prepare a HMMSPC Plan to assemble preventative and mitigative measures that would be used to avoid or minimize the potential impact of a hazardous material spill on groundwater quality. In particular, the plan would prohibit refueling activities and storage of hazardous materials within at least a 200-foot radius of all private wells and within a 400-foot radius of all

municipal or community supply wells. If a spill occurs, the HMMSPC identifies techniques to contain and remove contaminated soil.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – The impact would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – QST has preliminarily identified 24 water supply wells that may be within 150 feet of the construction work areas; additional field surveys would be needed to determine exactly how many wells are located within this distance and the wells' uses. QST will conduct pre- and post-construction water quality and yield testing of wells used for drinking water within 150 feet of the construction work areas. QST will communicate with the nearby well owners to determine changes in yield and discoloration during construction. Additionally, QST will provide a temporary potable water supply to well owners whose supply was adversely affected by construction. QST will repair or, if necessary, replace any municipal or domestic wells located within 150 feet of construction areas that are damaged by construction.

QST has already prepared a HMMSPC Plan. Implementation of QST-prepared plans (with recommended additions) for containing and cleaning waste liquids from the pipeline conversion process, for preventing hazardous material spills near sensitive groundwater sources, and for identifying and protecting domestic and municipal wells in the vicinity of construction areas would ensure that any degradation of the volume and quality of groundwater would be less than significant.

Specifically, QST's HMMSPC Plan identifies procedures to minimize the chances of a spill and, if a spill occurs, identifies techniques to contain and remove contaminated soil. This plan is intended to comply with and complement existing regulations pertaining to the safe use of hazardous materials. Persons responsible for handling hazardous materials for this project will be trained in the proper use and management of the materials and will be familiar with applicable laws, procedures, and best management practices related to them.

Impact: WATER 4 – Surface Water

Vehicle refueling and storage of fuel, oil, and other hazardous materials or fluids could potentially contaminate surface water by exceeding Federally, state, or Tribal water quality standards or water quality objectives.

Mitigation Measure

WATER/mm-5 - QST would prepare a HMMSPC Plan to assemble preventative and mitigative measures that would be used to avoid or minimize the potential impact of a hazardous material spill on groundwater quality. The HMMSPC Plan would include:

- *fueling restrictions;*
- *designation of storage, refueling, staging, and lubrication locations prior to construction;*
- *notification procedures;*
- *cleanup and disposal actions;*
- *typical fuel, lubricants, and other hazardous materials that may be used or stored in designated areas; and*
- *the types of containers that would be used for storage.*

WATER/mm-6 - QST would prepare a HMMSPC Plan which identifies procedures to minimize the chances of a hazardous material spill. In particular, the HMMSPC Plan would prohibit refueling activities and storage of hazardous materials within 100 feet of any stream or wetland.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternatives are suggested.

Cumulative Discussion – The impact would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the

finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – The locations of streams and wetlands have been identified in the FEIS/R. QST has already prepared a HMMSPC Plan. Implementation of QST-prepared plans (with recommended additions) for containing and cleaning waste liquids from the pipeline conversion process and for preventing hazardous material spills near sensitive water sources would ensure that any degradation of the quality of surface water would be less than significant.

Specifically, QST's HMMSPC Plan identifies procedures to minimize the chances of a spill and, if a spill occurs, identifies techniques to contain and remove contaminated soil. This plan is intended to comply with and complement existing regulations pertaining to the safe use of hazardous materials. Persons responsible for handling hazardous materials for this project will be trained in the proper use and management of the materials and will be familiar with applicable laws, procedures, and best management practices related to them.

Impact: WATER 5 – Surface Water

Construction would cause localized disturbances of the stream banks and to any existing riparian vegetation.

Mitigation Measure

WATER/mm-7 - Prior to ROW revegetation, erosion would be controlled as described in the FERC Plan and the FERC's Wetland and Waterbody Construction and Mitigation Procedures (FERC Procedures). See FEIS/R appendix B in the FEIS/R.

WATER/mm-8 - Prior to construction, QST would develop, in consultation with appropriate Federal, state (including CDFG), and Tribal land managing agencies, a site-specific plan for revegetating any woody riparian areas disturbed by construction and file this plan with the FERC Secretary for review. Plan implementation would only proceed with the written approval of the Director of OEP. This plan would:

- include measures to avoid the removal of any trees located within areas of disturbance;*
- include measures to avoid or minimize the construction ROW width in woody riparian areas to the maximum extent practicable;*
- include site-specific measures to revegetate any riparian area disturbed during construction to preconstruction condition, including species of similar type, diversity, and density; and*

- *prohibit construction staging from disturbing woody riparian areas.*

Prior to construction, QST would consult with Federal, Tribal, and state land management agencies (and the NRCS on private lands) to develop:

- *site-specific agreements to eliminate or minimize the extent and frequency of woody vegetation management efforts on the permanent ROW, and*
- *a weed management program that identifies the control measures to be used, the frequency of inspections, and the criteria for measuring weed control success.*

In addition, QST would file and obtain approval of the plans from the Director of OEP, the CSLC, and other land management agencies consulted before plan implementation.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternatives are suggested.

Cumulative Discussion – Any impacts would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – Approximately 41.5 acres of vegetation within or adjacent to 89 waterbodies or dry washes in California would be disturbed as a result of the Cabazon Reroute, pipeline replacements, and excavation sites. Construction in California washes would result in temporary disturbance to 3.5 acres (bank-to-bank width). These disturbances represent very small discrete areas (generally less than 0.1 acre or less). After considering these disturbances in the context of the available habitat, and the implementation of measures to protect, as well as recover riparian and desert wash habitat over the shortest possible time, it was concluded that long-term effects (greater than 5 years) on riparian vegetation would be less than significant.

D. Vegetation, Wildlife, and Fisheries

Impact: VEG 1 – Vegetation

Ground-disturbing construction activities would result in impacts on vegetative communities.

Mitigation Measure

VEG/mm-1 - In general, impacts to vegetation would be considered temporary (less than 3 to 5 years) because post-construction recovery is expected to occur as a result of implementing erosion control, revegetation and maintenance, and weed control procedures as discussed in QST's Soils Resource Management Plan and the FERC Plan and Procedures, which QST has adopted. QST would use native seed mixtures to revegetate all disturbed areas and would consult with the BLM and the NRCS and other county and state regulatory agencies, as appropriate, to determine seed mixtures, application rates, and optimal seeding periods. The removal of woody shrubs in unique communities such as riparian, wetlands, and California washes would be considered long-term impacts (greater than 5 years). The same mitigation measures would be applicable to these areas.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternatives are suggested.

Cumulative Discussion – Impacts would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – The success of reestablishing vegetation on the areas disturbed by construction depends upon factors such as soil fertility, drought conditions, fine textures, wetness, salinity or alkalinity, depth, pH, and permeability of subsoils. In general, most of the construction areas contain soils that would allow vegetation to be reestablished. Implementation of the QST-prepared soil management plans would ensure that reductions in soil productivity for agricultural and wildlife habitat uses from disturbed areas of the construction ROW would be less than significant.

Impact: VEG 2 – Woody Riparian Vegetation

The removal of trees or other woody vegetation in riparian communities and along dry washes would represent potential long-term direct impacts.

Mitigation Measure

VEG/mm-2 - Prior to construction, QST would develop, in consultation with appropriate Federal, state (including CDFG), and Tribal land managing agencies, a site-specific plan for revegetating any woody riparian areas disturbed by construction and file this plan with the FERC Secretary for review. Plan implementation would only proceed with the written approval of the Director of OEP. This plan would:

- include measures to avoid the removal of any trees located within areas of disturbance;*
- include measures to avoid or minimize the construction ROW width in woody riparian areas to the maximum extent practicable;*
- include site-specific measures to revegetate any riparian area disturbed during construction to preconstruction condition, including species of similar type, diversity, and density; and*
- prohibit construction staging from disturbing woody riparian areas.*

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternatives were suggested.

Cumulative Discussion – Impacts would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) and the California Department of Fish and Game (CDFG) and not the agency making the finding. Such changes have been adopted by such other agencies or can and should be adopted by such other agencies.

Facts Supporting the Finding – Approximately 41.5 acres of vegetation within or adjacent to 89 waterbodies or dry washes in California would be disturbed as a result of the Cabazon Reroute, pipeline replacements, and excavation sites. Construction in

California washes would result in temporary disturbance to 3.5 acres (bank-to-bank width). These disturbances represent very small discrete areas (generally less than 0.1 acre or less). After considering these disturbances in the context of the available habitat, and the implementation of measures to protect, as well as recover riparian and desert wash habitat over the shortest possible time, it was concluded that long-term effects (greater than 5 years) on riparian vegetation would be less than significant.

Impact: VEG 3 – Woody Vegetation Maintenance

Pipeline operations and maintenance activities, including the removal of woody vegetation and control of noxious weeds within the ROW, would result in vegetation community disturbance.

Mitigation Measure

VEG/mm-3 - Prior to construction, QST would consult with Federal, Tribal, and state land management agencies (and the NRCS on private lands) to develop:

- *site-specific agreements to eliminate or minimize the extent and frequency of woody vegetation management efforts on the permanent ROW, and*
- *a weed management program that identifies the control measures to be used, the frequency of inspections, and the criteria for measuring weed control success.*

In addition, QST would file and obtain approval of the plans from the Director of OEP, the CSLC, and other land management agencies consulted before plan implementation.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative were suggested.

Cumulative Discussion – Impacts would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency

Facts Supporting the Finding – Pipeline operation and maintenance activities would result in minor and local vegetation community disturbance (crushing during equipment movement, removal during excavation). To aid aerial inspection, QST proposes as a general measure to remove woody vegetation within a 50-foot width of the ROW. QST also proposes to implement a weed control and maintenance plan to control and prevent the establishment and spread of noxious weeds along the ROW. The methods to control woody vegetation, the maintenance of existing wildlife habitat values, and the methods for controlling noxious weeds will vary depending upon landowner and managing agency preferences. Implementation of construction ROW rehabilitation and weed control measures contained in the QST Soils Resource Management Plan, the FERC Procedures (and additional recommendations) for upland and riparian vegetation would yield vegetation composition and productivity changes that would be less than significant.

Impact: VEG 4 – Wetland and Riparian Vegetation

The loss of vegetation in wetlands and riparian areas could indirectly affect wildlife species by reducing cover, food sources, nest sites, and other biological requirements.

Mitigation Measure

VEG/mm-4 - Additionally, mitigation for impacts to streambeds in California would be provided by implementation of FERC's Plan and Procedures and a Lake and Streambed Alteration Agreement with CDFG.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternatives were suggested.

Cumulative Discussion – Impacts would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) and the California Department of Fish and Game (CDFG) in addition to the agency making the finding. Such changes have been adopted by such other agencies or can and should be adopted by such other agencies.

Facts Supporting the Finding – Approximately 41.5 acres of vegetation within or adjacent to 89 waterbodies or dry washes in California would be disturbed as a result of the Cabazon Reroute, pipeline replacements, and excavation sites. Construction in California washes would result in temporary disturbance to 3.5 acres (bank-to-bank

width). These disturbances represent very small discrete areas (generally less than 0.1 acre or less). After considering these disturbances in the context of the available habitat, and the implementation of measures to protect, as well as recover riparian and desert wash habitat over the shortest possible time, it was concluded that long-term effects (greater than 5 years) on riparian vegetation would be less than significant.

Impact: VEG 5 – Vegetation Management

Long-term vegetation management on the ROW could result in impact on soils and wildlife.

Mitigation Measure

VEG/mm-5 - Prior to construction, QST would consult with Federal, Tribal, and state land management agencies (and the NRCS on private lands) to develop:

- *site-specific agreements to eliminate or minimize the extent and frequency of woody vegetation management efforts on the permanent ROW, and*
- *a weed management program that identifies the control measures to be used, the frequency of inspections, and the criteria for measuring weed control success.*

In addition, QST would file and obtain approval of the plans from the Director of OEP, the CSLC, and other land management agencies consulted before plan implementation.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternatives were suggested.

Cumulative Discussion – Impacts would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – Approximately 41.5 acres of vegetation within or adjacent to 89 waterbodies or dry washes in California would be disturbed as a result of

the Cabazon Reroute, pipeline replacements, and excavation sites. Construction in California washes would result in temporary disturbance to 3.5 acres (bank-to-bank width). These disturbances represent very small discrete areas (generally less than 0.1 acre or less). After considering these disturbances in the context of the available habitat, and the implementation of measures to protect, as well as recover riparian and desert wash habitat over the shortest possible time, it was concluded that long-term effects (greater than 5 years) on riparian vegetation would be less than significant.

E. Threatened, Endangered, and Special Status Species

Impact: T & E 1 – Threatened or Endangered Species

Construction activities could result in temporary disturbance to habitat, displacement of individuals, or other impact on special status species. A total of 39 special status species may potentially exist within California construction areas, including 17 federally listed species, 1 species proposed for Federal listing, 2 Federal candidate species, as well as state-listed species and those listed as species of concern by other agencies (see FEIS/R sections 4.5, 5.5 and Appendix E). Types of impacts would be similar to those expected on plants, fish, or the appropriate wildlife group.

Mitigation Measure

T & E/mm-1 - Project-committed mitigation measures are provided by QST (see FEIS/R section 5.5.2 and appendix E-1). In addition, mitigation measures have been included in the Biological Opinion issued by the FWS as a part of the Section 7 consultation initiated by the FERC with the submittal of a Biological Assessment for species that could be affected by the proposed project. This list included all of the species requested by the CDFG.

T & E/mm-2 - QST would conduct additional and new surveys, where necessary, for the federally and state listed or proposed endangered, threatened, or other sensitive species in the appropriate habitat along the facilities during the appropriate survey period(s). Surveys shall include access routes, especially where route disuse has allowed the growth off vegetative cover that could support the presence of listed species. Before initiating surveys, QST shall consult with the FWS and state agencies for appropriate survey methods and periods for each species. If facilities are not constructed within 1 year from the date of issuance of the FERC Certificate, QST shall consult with the appropriate offices of the FWS and CDFG to update the species list and to determine if additional surveys are required. The survey reports and any FWS and state agency comments on the surveys and their conclusions would be filed with the FERC Secretary. The survey reports would include the following information:

- a. *name(s) and qualifications of the person(s) conducting the survey;*

- b. method(s) used to conduct the survey;*
- c. date(s) of the survey;*
- d. area surveyed (include the MPs surveyed);*
- e. an analysis of potential impacts, both beneficial and negative, that could result from the construction of the proposed project; and*
- f. proposed mitigation that would substantially minimize or avoid the potential impacts.*

In addition, QST shall not begin construction activities until:

- g. the FERC staff receives survey comments from the FWS or state agencies regarding the proposed action;*
- h. the FERC staff completes formal consultation with the FWS, if necessary; and*
- i. QST has received written notification from the Director of OEP that construction or use of mitigation may begin.*

QST must receive written approval from the Director of OEP before implementing any mitigation measures.

As stated, in part, on page 5-52 of the FEIS/R: "Implementation of the mitigation measures described in Appendix E-1, the reasonable and prudent measures contained in the FWS Biological Opinion would adequately address the potential effects to the species that have been identified that may be affected by project surface-disturbing activities associated with project operation and maintenance. As a result of these measures, the effects to federally listed, state-listed species would be less than significant.

The mitigation measures contained in the BO dated September 22, 2000, are:

QST shall consult with the appropriate BLM and CDFG offices regarding compensation requirements and obtain a Consistency Determination, if necessary, from CDFG under section 2080.1 of the Fish and Game Code. (From Biological Opinion - Proposed Minimization Measures, item 23, page 23).

Any pruning of shrubs while accessing, or while at the Big Morongo Canyon Site will leave the roots and base intact, and plywood sheets will be used to protect the roots and bases while vehicles are driving over them. (From Biological Opinion - Proposed Minimization Measures, item 24d, page 24).

Any rocks and earth moved to gain access to the Big Morongo Canyon site, will be moved back to their original location and the area recontoured on the way out of the Canyon at the conclusion of the project. (From Biological Opinion - Proposed Minimization Measures, item 24e, page 24).

Crew members traveling to and from the Big Morongo Canyon site will use only one truck, if feasible, to minimize disturbance. (From Biological Opinion - Proposed Minimization Measures, item 24f, page 24).

The Applicant will identify and discuss with BLM (Robin Kobaly) the exact route to access the Big Morongo Canyon project site and specific means to minimize damage to vegetation and adverse effects to wildlife and riparian habitats in the northern portion of the Big Morongo Canyon. (From Biological Opinion - Proposed Minimization Measures, item 24g, page 24).

Construction activities will not remove or damage mature willow and cottonwood trees in Big Morongo Canyon. (From Biological Opinion - Proposed Minimization Measures, item 24h, page 24).

Work would be done only in periods of no flow or low flow in Big Morongo Canyon. No flow is preferable, but cannot be guaranteed. If flow is present, the stream will be diverted around the work using a flume or other techniques. (From Biological Opinion - Proposed Minimization Measures, item 24i, page 24).

At the Big Morongo Canyon site, only soils over the trench will be stripped of vegetation. The root systems of other vegetation will be left intact. Where the other vegetation is non-native, attempts will be made to eradicate it. If it is determined that crushed vegetation could damage rubber-tired vehicles, the vegetation will be cut off at ground level, otherwise it will not be cut down. (From Biological Opinion - Proposed Minimization Measures, item 24j, page 24).

At the Big Morongo Canyon site, the area to be disturbed for the pipe repair will be minimized and work will be coordinated in such a manner that a minimum amount of time will be necessary to complete the work. The work site will be managed to prevent erosion and sedimentation. (From Biological Opinion - Proposed Minimization Measures, item 24k, pages 24 and 25).

Immediately after the work is completed at the Big Morongo Canyon site, weather permitting, the site will be restored by grading the earth back to its original contours, reestablishing the stream and revegetating the site. QST will consult with BLM (Robin Kobaly) and the FWS on the appropriate methods of revegetation and plant species to be used. (From Biological Opinion - Proposed Minimization Measures, item 24l, page 26).

QST will develop a specific plan for the proposed repair in Big Morongo Canyon and have it approved by BLM (Robin Kobaly) prior to the start of the work. (From Biological Opinion - Proposed Minimization Measures, item 24n, page 26).

All work at Mileposts 109.72 and 98.89 will be conducted according to FERC's Wetland and Waterbody Construction and Mitigation Procedures. (From Biological Opinion - Proposed Minimization Measures, item 24o, page 26).

QST shall consult with CDFG to determine whether site-specific mitigation is required under the California Endangered Species Act or other applicable regulations for disturbance to the coastal sage scrub habitat. (From Biological Opinion - Proposed Minimization Measures, item 29, page 27).

Construction activities within listed species' habitat will occur only during daylight hours with the exception of emergencies that pose a threat to human health or safety. (From Biological Opinion - Terms and Conditions, item 1d, page 65).

Firearms will be prohibited from project sites, except for authorized law enforcement personnel. (From Biological Opinion - Terms and Conditions, item 1o, page 68).

Herbicides shall not be used on the rights-of-way, access roads, pipeline corridors, or fencelines unless approved in writing by the FWS. (From Biological Opinion - Terms and Conditions, item 1p, page 68).

Trash and food items will be disposed of promptly in predator-proof containers with resealable lids. Trash includes, but is not limited to, cigarettes, cigars, gum wrappers, tissue, cans, paper, plastic, and bags. Trash containers will be removed regularly (at least once per week). This effort will reduce the attractiveness of the area to opportunistic predators such as desert kit fox, coyotes, and common ravens. Any construction refuse, including, but not limited to, broken parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, boxes, and welding rods will be removed from the site each day and disposed of properly. (From Biological Opinion - Terms and Conditions, item 2, page 68).

To the extent possible, previously disturbed areas within each component of the project will be used for storage of equipment, parking or vehicles, stockpiling of excavated materials, or any other surface-disturbing activities. The authorized biologist, in consultation with QST's inspectors, will ensure compliance with these measures. All activities that extend outside of the current pipeline right-of-way will require prior approval and review by BLM, the FWS, and appropriate state wildlife agency. (From Biological Opinion - Terms and Conditions, item 3b, page 69).

All areas to be disturbed will have boundaries flagged prior to construction, and all disturbance will be confined to the flagged areas. All employees will be instructed that their activities must be confined to locations within the flagged areas. Disturbance beyond the actual construction zone is prohibited. (From Biological Opinion - Terms and Conditions, item 3c, page 69).

Topsoil will be removed to a depth of 6 to 12 inches in all areas of potential, native, seed-bearing soil where ground breaking will take place. The determination of which soils are potentially seed-bearing will be the responsibility of the biological monitor. (From Biological Opinion - Terms and Conditions, item 3d, page 69).

Removed topsoil will be stockpiled in a separate area and designated as "topsoil" to prevent contamination by or combination with other excavated soils. Reasonable measures will be taken to ensure the protection and preservation of the stockpiled topsoil to prevent loss of the seed bed from wind and rain or contamination by other soils or manmade contaminants. (From Biological Opinion - Terms and Conditions, item 3e, page 69).

Where topsoil removal or project excavations are not required, any vegetation in the right-of-way will be "bladed off" at ground level or simply crushed to preserve the root systems of the plants. (From Biological Opinion - Terms and Conditions, item 3f, page 69).

Any fuel or hazardous waste leaks or spills will be stopped or repaired immediately and cleaned up at the time of occurrence. Service vehicles will carry a bucket and pads to absorb leaks or spills. (From Biological Opinion - Terms and Conditions, item 3g, page 69).

Contaminated soil will be removed and disposed of at an appropriate facility. If spills occur in a maintenance yard, they will be cleaned up after construction is complete. (From Biological Opinion - Terms and Conditions, item 3h, page 70).

Camping and fires will be prohibited within the project site. (From Biological Opinion - Terms and Conditions, item 3i, page 70).

All waste and leftover materials remaining after construction of this project will be removed from the site after project completion. (From Biological Opinion - Terms and Conditions, item 3j, page 70).

After construction, the project area will be recontoured to match its original contours as much as possible. (From Biological Opinion - Terms and Conditions, item 3k, page 70).

FERC and QST will implement the reclamation plan for the project approved by the FWS and appropriate cooperators (Appendices B and C, FERC and CSLC 2000a). (From Biological Opinion - Terms and Conditions, item 3l, page 70).

Prior to initiation of construction activities, QST shall consult with CDFG and obtain either a Consistency Determination under section 2080.1 or a permit under section 2081 of the California Fish and Game Code. QST shall consult with CDFG and BLM California Desert District Field Office regarding applicable compensation for the loss of 55 acres of desert tortoise and 2.11 acres of coastal California gnatcatcher habitat. (From Biological Opinion - Terms and Conditions, item 3m, page 70).

The authorized biologist will be responsible for determining compliance with mitigation measures as defined by the biological opinion or other agreements between State or Federal agencies. A biological monitor may be employed to assist with the pre-activity surveys and general monitoring efforts. The authorized biologist will have the authority to briefly halt construction activities that are not in compliance with the biological opinion. Construction activities will be halted only long enough to remedy the immediate situation and will apply only to the equipment and parties involved in the situation. All actions of non-compliance or conditions of threat to federally proposed or listed species will be recorded immediately by the biological monitor and reported to FERC or land management agency. FERC or the agency will immediately report all such actions and conditions to the FWS. (From Biological Opinion - Terms and Conditions, item 6d, page 72).

All fuel or hazardous waste leaks, spills, or releases will be reported immediately to FERC and the Federal agency that administers the land where the incident occurs. (From Biological Opinion - Terms and Conditions, item 6e, page 72).

After completion of construction, a thorough inspection of the work site will be conducted by the authorized biologist to determine the extent of compliance with the conditions of the Biological Opinion. (From Biological Opinion - Terms and Conditions, item 6h, page 73).

Upon completion of the pipeline project, all materials and vehicles/equipment used during the project shall be removed from the project area. Machinery and personnel involved with subsequent reclamation shall be permitted along the corridor during the course of revegetation efforts. Once reclamation measures have been implemented, no associated equipment and supplies will be allowed to remain on-site. (From Biological Opinion - Terms and Conditions, item 6j, page 74).

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternatives are suggested.

Cumulative Discussion – The cumulative effects of disturbance, displacement of individual animals, and habitat fragmentation could exert additional pressure on sensitive wildlife species. Even though all individual projects would mitigate these habitat disturbances with revegetation measures, the residual cumulative impacts on the habitats of special-status species may become significant in the future as additional projects are constructed.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) and the California Department of Fish and Game (CDFG) in addition to the agency making the finding. Such changes have been adopted by such other agencies or can and should be adopted by such other agencies.

Facts Supporting the Finding – Compared to relatively abundant species, the magnitude and duration of construction impacts could be greater for threatened and endangered species since their distribution and relative abundance is usually more limited. Habitat availability is considered to be an important limiting factor for many of the threatened and endangered species. Therefore, the loss or alteration of suitable habitat is considered in the impact analysis for the federally listed species or the species proposed of Federal listing. Potential impacts to the federally listed species, many of which are also recognized as such by California, are described in FEIS/R section 5.5.4.1 and in a separate Biological Assessment (BA) that has been prepared by the FERC and submitted to the USFWS for Section 7 consultation. QST has developed and submitted a group of general mitigation measures that would be used to minimize impacts to federally listed or other sensitive species (FEIS/R appendix E-1).

On July 28, 2000, FERC issued its Certificate of Public Convenience and Necessity (CPCN) to Questar. In its Biological/Conference Opinion (BO) for the project, dated September 22, 2000, the USFWS concluded that:

"After reviewing the current status of the listed species, the environmental baseline for the action area, the effects of the activities associated with conversion of the existing crude-oil pipeline to natural gas service, and the cumulative effects, it is the Service's biological/conference opinion that the proposed project is not likely to jeopardize the continued existence of the desert tortoise, triple-ribbed milk-vetch, lease Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, or arroyo southwestern toad, and is not likely to destroy or adversely modify designated critical habitat for the desert tortoise (Chemehuevi unit) or proposed critical habitat for the coastal California gnatcatcher and arroyo southwestern toad."

Impact: T & E 2 – Threatened or Endangered Species

The project is likely to adversely affect the desert tortoise and triple-ribbed milk-vetch.

Mitigation Measure

T & E/mm-3 - QST has committed to the general mitigation measures provided in appendix E-1 of this FEIS/R. Additionally, mitigation measures and compensation for desert tortoise habitat are outlined in the Biological Opinion (BO), which will describe reasonable and prudent measures for protecting the desert tortoise and its habitat. The FWS has also included in its BO the results of formal consultation on the triple-ribbed milk-vetch.

T & E/mm-4 - Prior to construction, QST will resurvey the excavation site at MP 109, including the access route, for the occurrence of the triple-ribbed milk-vetch according to FWS and CDFG guidelines, and obtain a permit under Section 2081 of the California Fish and Game Code.

T & E/mm-5 - QST will obtain a permit under Section 2081 of the California Fish and Game Code for the desert tortoise (Mojave population) prior to construction.

As stated, in part, on page 5-52 of the FEIS/R: "Implementation of the mitigation measures described in Appendix E-1, the reasonable and prudent measures contained in the FWS Biological Opinion would adequately address the potential effects to the species that have been identified that may be affected by project surface-disturbing activities associated with project operation and maintenance. As a result of these measures, the effects to federally listed, state-listed species would be less than significant.

The mitigation measures contained in the BO dated September 22, 2000, are:

Excavation of desert tortoise burrows that will be affected by project actions will begin up to 14 days prior to the initiation of surface-disturbing activities. When tortoises are active, however, a final check of the project site will occur no more than 24 hours before the onset of work. Only qualified biologists or other specifically trained personnel should handle and safely move tortoises out of harm's way using protocols acceptable to the FWS. (From Biological Opinion - Proposed Minimization Measures, item 22, page 23).

Prior to the onset of construction activities, including driving up to the project site, the specific identified route will be resurveyed for triple-ribbed milk-vetch. Any plant located in close proximity to the access route will be fenced with conspicuously colored snow-fencing to prevent damage or destruction. At the conclusion of construction activities, fencing will be removed. (From Biological Opinion - Proposed Minimization Measures, item 24b, pages 23 and 24).

A biologist experienced in the identification of desert tortoise and dormant triple-ribbed milk-vetch will be present during any project related activities. (From Biological Opinion - Proposed Minimization Measures, item 24c, page 24).

An authorized biologist will conduct preconstruction surveys for desert tortoise and be present during all construction activities at Mileposts 98.32, 98.89, 103.81 and Milepost 105.82 within the Coachella Valley. (From Biological Opinion - Proposed Minimization Measures, item 25, page 26).

Any time a vehicle is parked within desert tortoise habitat, whether the engine is engaged or not, the ground around and underneath the vehicle will be inspected for desert tortoises prior to moving the vehicle. If a desert tortoise is observed, an authorized biologist will be contacted. If possible, the tortoise will be left to move on its own. If the tortoise does not move within 15 minutes, the tortoise will be removed and relocated by the authorized biologist in accordance with the tortoise handling provisions of the biological opinion. (From Biological Opinion - Terms and Conditions, item 1d, page 65).

A pre-activity survey of each project component located within listed species habitat shall be conducted by an authorized biologist no more than 7 days prior to the onset of activities. An authorized biologist(s) will survey the site for desert tortoises using techniques providing 100-percent coverage of the area proposed for disturbance. Transects will be no greater than 10 meters apart. The site boundaries will be flagged prior to the biological survey. All burrows that cannot be avoided will be excavated by hand. All desert tortoise handling and burrow excavations will be conducted by an authorized desert tortoise biologist in accordance with FWS-approved protocol (Desert Tortoise Council 1994, revised 1999). All burrows of any protected wildlife species or locations of any protected plants identified during surveys outside of, but within 100 meters of the pipeline right-of-way will be flagged prominently so they can be avoided during work activities. Silt fencing or other semi-permanent fencing materials will be erected around such listed species sites to maximize protection during project construction. Project actions should avoid disturbing such sites to the extent possible. At the completion of each installation phase, all materials used to mark or identify the burrows and plant locations shall be promptly removed. (From Biological Opinion - Terms and Conditions, item 1g, page 66).

All potential tortoise burrows found in the construction zone, whether occupied or vacant, will be excavated by an authorized biologist and collapsed or blocked to prevent desert tortoise re-entry. All burrows will be excavated by hand with hand tools to allow removal of desert tortoises or desert tortoise eggs. (From Biological Opinion - Terms and Conditions, item 1h, page 66).

Tortoises and nests found on the project area shall be relocated by an authorized tortoise biologist in accordance with FWS-approved protocol (Desert Tortoise Council 1994, revised 1999). Desert tortoises will be relocated 300 to

1,000 feet into adjacent undisturbed habitat. Handling and disposition of all tortoises handled shall be documented. (From Biological Opinion - Terms and Conditions, item 1i, page 66).

All desert tortoises observed by project workers will be reported immediately to the authorized biologist, who will move the tortoise offsite into adjacent undisturbed habitat. Tortoises will be handled only when necessary, and in accordance with guidelines provided in this biological opinion. Desert tortoises will be moved only by an authorized desert tortoise biologist and solely for the purpose of moving them out of harm's way. Appropriate State permits will be acquired from CDFG prior to handling any live desert tortoise, desert tortoise carcass, or desert tortoise egg. (From Biological Opinion - Terms and Conditions, item 1j, page 66).

All desert tortoises and desert tortoise eggs located in the linear right-of-way will be relocated 300 to 1,000 feet into adjacent undisturbed habitat. Tortoises found above ground will be placed under a marked bush in the shade. A tortoise located in a burrow will be placed in an existing unoccupied burrow of the same size and orientation as the one from which the tortoise was taken. If a suitable natural burrow is unavailable, an authorized biologist will construct one of the same size and orientation as the one from which the tortoise was removed utilizing the protocol for burrow construction in section B.5.f (Desert Tortoise Council 1994, revised 1999). Any tortoise found within 1 hour before nightfall will be placed in a separate clean cardboard box and held overnight in a cool location. The box will be covered and kept upright at all times to minimize stress to the tortoise. Each box will be used once and then disposed of properly. The tortoise will be released the following day in the same area from which it was collected and using the procedures described above. Each tortoise will be handled with a different pair of disposable latex gloves. After each use, the gloves will be properly discarded and a fresh set used for each subsequent tortoise handling. (From Biological Opinion - Terms and Conditions, item 1k, page 67).

Authorized biologist(s) will be assigned to monitor heavy equipment during construction for the protection of listed species and to monitor compliance with the terms and conditions of this biological opinion. The level of effort involved in this monitoring will be dependent on listed species activity, and for desert tortoise, whether tortoise-proof fencing has been installed around the construction area. (From Biological Opinion - Terms and Conditions, item 1l, page 67).

If blasting is required in desert tortoise habitat, a biological monitor will be assigned to each blasting crew or to each area in which blasting will occur. Prior to any blast, a 200-foot radius around the blast site will be surveyed for desert tortoises using techniques providing 100-percent coverage; transects will be no greater than 10 meters apart. Above-ground tortoises will be relocated at least 500 feet from the blast site. Desert tortoises located in burrows that are

within 50 feet of the blast site will be relocated at least 75 feet away from the blast site to an unoccupied existing burrow of the same size and orientation. If a suitable existing burrow is unavailable, an artificial burrow of the same size and orientation will be constructed by an authorized biologist utilizing FWS-approved protocol (Desert Tortoise Council 1994, revised 1999). Burrows either occupied by desert tortoises or with undetermined occupancy status and located 50 feet or further away from the blast site will be flagged and stuffed with newspaper prior to the blast. The newspaper will be removed immediately after the blast and the burrows assessed for damage. The authorized biologist will wear latex disposable gloves to remove the newspaper. The gloves and newspaper will then be disposed of without contact with other items. (From Biological Opinion - Terms and Conditions, item 1m, pages 67 and 68).

Dogs are capable of significant harm to desert tortoises and will be prohibited from the project site. The only exception to this measure will be dogs that are clearly used for security purposes within fenced areas. (From Biological Opinion - Terms and Conditions, item 1n, page 68).

Within desert tortoise habitat, open pipeline trenches, auger holes, or other excavations greater than 1-foot deep will be inspected by an authorized biologist once in the morning before construction begins for the day, periodically throughout the day, once at the end of the day, and immediately prior to backfilling. Pipe segments will be capped or closed each night. Such pipe segments will be inspected regularly before sealing. For open trenches, earthen escape ramps with 2:1 or lesser slopes will be maintained at least every 0.25 mile along open trenches and at each end. Other excavations that remain open overnight will be covered or ramped to prevent entrapment of wildlife. If QST determines that covering such excavations is not practicable, such excavation sites shall be completely enclosed with temporary tortoise-proof fencing. (From Biological Opinion - Terms and Conditions, item 4, page 70).

All encounters with listed species will be reported to the authorized biologist. (From Biological Opinion - Terms and Conditions, item 6b, pages 71 and 72).

The authorized biologist(s) will maintain a record of each observation of desert tortoise during the project. The information gathered will include the following: (1) Location; (2) date and time of observation; (3) whether the tortoise was handled; (4) general health and whether it voided its bladder; (5) location the tortoise was moved from and location moved to; and (6) any observed unique physical characteristics of each individual. (From Biological Opinion - Terms and Conditions, item 6g, page 73).

An authorized biologist(s) will be present during all phases of construction. In accordance with Procedures for Endangered Species Act Compliance for the Mojave Desert Tortoise (FWS 1992), an authorized biologist should: (1) Possess a bachelor's or graduate degree in biology, ecology, wildlife biology,

herpetology, or related fields; (2) demonstrate a minimum of 60 days prior field experience using accepted resource agency techniques to survey for desert tortoises; and (3) have the ability to recognize and to accurately identify and record all types of desert tortoise sign. The FWS does not endorse any individual or company with respect to their abilities to conduct satisfactory surveys. Only the authorized biologist shall be allowed to handle/relocate desert tortoises. FERC shall submit the names and credentials of qualified individuals to the FWS for review and approval at least 15 days prior to the onset of any surface disturbing events. No project-related activities will commence until an authorized biologist has been selected. (From Biological Opinion - Terms and Conditions, item 6c, page 72).

Upon locating dead or injured desert tortoises, the Environmental Inspector will notify FERC or BLM immediately by phone and within 5 days in writing. Initial notification also must be made immediately to the FWS Division of Law Enforcement in Torrance, California, at telephone number 310-328-6307 (facsimile). Written notification to the FWS's Carlsbad Office, at (760) 431-9440 will occur within 15 days of the date of the finding or incident, and will include the following information: (1) Date and time of finding or incident; (2) location of carcass or injured tortoise; (3) a photograph; (4) cause of death or injury; and (5) other pertinent information. Care will be taken in the handling of sick or injured specimens to ensure effective treatment and care, and in the handling of dead specimens to preserve biological material in the best possible state for later analysis of cause of death. In conjunction with the care of a sick or injured desert tortoise or preservation of the biological materials from a dead desert tortoise, the finder has the responsibility to carry out instructions provided by the FWS's Division of Law Enforcement to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed. (From Biological Opinion - Terms and Conditions, item 6f, page 73).

QST and an authorized biologist will prepare a report to be distributed to FERC, BLM, the FWS, and CDFG no later than 90 days following the completion of construction activity. The report will document the numbers and location of desert tortoises encountered, their disposition, effectiveness of mitigation measures, practicality of mitigation measures, recommendations for future mitigation measures that allow for better protection or more workable implementation, and an estimate of acreage disturbed. (From Biological Opinion - Terms and Conditions, item 6i, page 73).

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – The cumulative effects of disturbance, displacement of individual animals, and habitat fragmentation could exert additional pressure on sensitive

wildlife species. Even though all individual projects would mitigate these habitat disturbances with revegetation measures, the residual cumulative impacts on the habitats of special-status species may become significant in the future as additional projects are constructed.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) and the California Department of Fish and Game (CDFG) in addition to the agency making the finding. Such changes have been adopted by such other agencies or can and should be adopted by such other agencies.

Facts Supporting the Finding – Potential impacts to milk-vetch species would involve disturbance to potential habitat from construction activities. Previous surveys of proposed construction areas in California except the excavation sites revealed no individual plants or populations. However, records exist for triple-ribbed milk-vetch within several miles of the Cabazon Reroute and some excavation sites (e.g., within Morongo Canyon).

QST conducted surveys for milk-vetch species in March 2000 for five excavation sites within possible habitat (MPs 98.32, 98.89, 103.81, 105.82, and 109.72). Three triple-ribbed milk-vetch were observed within 10 feet of the access road to the central part of the Big Morongo Canyon. However, this species was not observed at any of the pipeline locations slated for project work. On April 12, 2000, the FERC amended its Biological Assessment (BA), previously submitted to the FWS, to include the triple-ribbed milk-vetch for formal Section 7 consultation.

Potential construction-related impacts to the desert tortoise could include direct mortalities or injuries as a result of being crushed by vehicles, movement of soil, or entrapment in burrows or in open trenches. In California, a minimum of 12 pipeline segments in the Danby-Ward Valley area and 35 excavation sites are located within the designated critical habitat for the Mojave population of the desert tortoise. An additional 30 excavation sites are located within the geographic range, but outside of critical habitat in California. Construction of project components in California would disturb about 54.9 acres of tortoise habitat, of which about 27.8 acres would be within designated critical habitat. Recent surveys and historical accounts have indicated desert tortoise in or near proposed construction areas in California (see FEIS/R appendix E, section E.2.1.3).

Key elements of mitigation for impacts on the desert tortoise would consist of monitoring and relocation of any individuals that were present within the construction areas. Numerous general mitigation measures (FEIS/R appendix E) would reduce potential adverse impacts, such as monitoring with a qualified biologist prior to and during construction activities, and identifying and protecting tortoise burrows that are present within the construction ROW. Excavation of burrow sites within construction areas

would begin up to 14 days prior to initiation of surface-disturbing activities. When tortoises are active, however, a final check for the presence of tortoises would be completed no more than 24 hours prior to the onset of work. Handling tortoises for relocation would be completed by a qualified biologist, as required by the FWS. With the submittal of the BA, the FERC has entered formal Section 7 consultation with the FWS on the desert tortoise (Mojave population).

On July 28, 2000, FERC issued its Certificate of Public Convenience and Necessity (CPCN) to Questar. In its Biological/Conference Opinion (BO) for the project, dated September 22, 2000, the USFWS concluded that:

"After reviewing the current status of the listed species, the environmental baseline for the action area, the effects of the activities associated with conversion of the existing crude-oil pipeline to natural gas service, and the cumulative effects, it is the Service's biological/conference opinion that the proposed project is not likely to jeopardize the continued existence of the desert tortoise, triple-ribbed milk-vetch, lease Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, or arroyo southwestern toad, and is not likely to destroy or adversely modify designated critical habitat for the desert tortoise (Chemehuevi unit) or proposed critical habitat for the coastal California gnatcatcher and arroyo southwestern toad."

Impact: T & E 3 – Threatened or Endangered Species

Construction in or near southwestern willow flycatcher habitat during the breeding season could impact nesting birds.

Mitigation Measure

T & E/mm-6 - QST will avoid construction at the Beaumont Compressor Station, and all other locations with potential habitat where birds are present during surveys, during the breeding season (May 1 through August 15).

T & E/mm-7 - If construction must occur during the breeding season, QST will conduct surveys according to FWS protocol, prior to construction. If no southwestern willow flycatchers are present at a site, construction could proceed. If the species is present, QST would suspend construction at the site(s) until after the breeding season or until the FERC staff reinitiates and completes consultation with the FWS.

T & E/mm-8 - Project-committed mitigation measures are provided by QST (see FEIS/R section 5.5.2 and appendix E-1). In addition, mitigation identified in the FWS as a part of its BO, will be complied with by Questar.

T & E/mm-9 - Additional surveys may be required, as discussed in T & E 1/mm2.

As stated, in part, on page 5-52 of the FEIS/R: "Implementation of the mitigation measures described in Appendix E-1, the reasonable and prudent measures contained in the FWS Biological Opinion would adequately address the potential effects to the species that have been identified that may be affected by project surface-disturbing activities associated with project operation and maintenance. As a result of these measures, the effects to federally listed, state-listed species would be less than significant.

The mitigation measures contained in the BO dated September 22, 2000, are:

At Milepost 109.72, construction activities will not occur during the nesting season for the southwestern willow flycatcher (May 1 through September 1). No construction within Big Morongo Canyon will occur between March 15 and September 15. (From Biological Opinion - Proposed Minimization Measures, item 24a, page 23).

Compensation for the area disturbed will be made by restoring another area of potential southwestern willow flycatcher or least Bell's vireo habitat along the same riparian area at a 2:1 ratio (10,000 square feet). The area to be restored will be chosen with the approval of BLM (Robin Kobaly) and the FWS, and will be near the area that is disturbed by the work. The restoration plan should consist of native riparian species and be approved by BLM (Robin Kobaly) and the FWS, with the same success criteria as outlined in FERC'S Wetland and

Waterbody Construction and Mitigation Procedures. (From Biological Opinion - Proposed Minimization Measures, item 24m, page 26).

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – The cumulative effects of disturbance, displacement of individual animals, and habitat fragmentation could exert additional pressure on sensitive wildlife species. Even though all individual projects would mitigate these habitat disturbances with revegetation measures, the residual cumulative impacts on the habitats of special-status species may become significant in the future as additional projects are constructed.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – In California, potential habitat for the southwestern willow flycatcher is present in riparian areas near the Beaumont Compressor Station and excavation sites at MPs 109.7 and 124.8. Surveys at the sites in California did not reveal the presence of this species.

Potential impacts to the southwestern willow flycatcher would include loss of potential habitat and noise disturbance. If breeding birds were present at the sites in California during construction, birds could be displaced due to noise and human activities. These impacts could include the disruption of breeding activities for one season, which would affect the annual production for the disrupted breeding pair(s). This impact would occur only if construction occurred at these locations during May through August.

On July 28, 2000, FERC issued its Certificate of Public Convenience and Necessity (CPCN) to Questar. In its Biological/Conference Opinion (BO) for the project, dated September 22, 2000, the USFWS concluded that:

"After reviewing the current status of the listed species, the environmental baseline for the action area, the effects of the activities associated with conversion of the existing crude-oil pipeline to natural gas service, and the cumulative effects, it is the Service's biological/conference opinion that the proposed project is not likely to jeopardize the continued existence of the desert tortoise, triple-ribbed milk-vetch, lease Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, or arroyo southwestern

toad, and is not likely to destroy or adversely modify designated critical habitat for the desert tortoise (Chemehuevi unit) or proposed critical habitat for the coastal California gnatcatcher and arroyo southwestern toad."

Impact: T & E 4 – Threatened or Endangered Species

Construction in or near coastal California gnatcatcher habitat during the breeding season could impact nesting birds.

Mitigation Measure

T & E/mm-10 - QST will avoid construction at the Beaumont Compressor Station and excavation sites within coastal sage scrub habitat, and all other locations with potential habitat where birds are present during surveys, during the breeding season (February 15 through August 15).

T & E/mm-11 - QST will survey excavation sites within coastal sage scrub habitat prior to the onset of construction activity according to FWS and CDFG guidelines. In addition, QST would consult with the CDFG to determine whether mitigation is required under the CESA or other applicable regulations for disturbance to the coastal sage scrub habitat at the excavation sites.

T & E/mm-12 - If surveys indicate no coastal California gnatcatchers are present, and appropriate habitat mitigation requirements are fulfilled, construction could proceed. If this species is found in any project area, QST will suspend construction activity at the site until the FERC staff reinitiates and completes consultation with the FWS.

T & E/mm-13 - Project-committed mitigation measures are provided by QST (see section 5.5.2 and appendix E-1 of the FEIS/R). In addition, mitigation measures identified in the FWS as a part of its BO, will be complied with by Questar.

T & E/mm-14 - Additional surveys may be required, as discussed in T & E 1/mm2.

As stated, in part, on page 5-52 of the FEIS/R: "Implementation of the mitigation measures described in Appendix E-1, the reasonable and prudent measures contained in the FWS Biological Opinion would adequately address the potential effects to the species that have been identified that may be affected by project surface-disturbing activities associated with project operation and maintenance. As a result of these measures, the effects to federally listed, state-listed species would be less than significant.

The mitigation measures contained in the BO dated September 22, 2000, are:

Because of potential noise disturbance to nesting gnatcatchers, QST will avoid construction work at the Beaumont Compressor Station during the breeding season for the gnatcatcher (February 15 through August 15). If construction must be conducted during the breeding period, QST will survey the area according to FWS protocol. The presence of gnatcatchers at the site would require that QST suspend construction at the Beaumont Compressor Station until the FERC staff reinitiates and completes consultation with the FWS. (From Biological Opinion - Proposed Minimization Measures, item 27, pages 26 and 27).

Prior to initiating construction activities, QST shall survey 16 previously un-surveyed excavation sites within coastal sage scrub habitat according to the FWS and CDFG guidelines. If gnatcatchers are found in any project area, QST will suspend construction activity at the site until the FERC staff reinitiates and completes consultation with the FWS. (From Biological Opinion - Proposed Minimization Measures, item 28, page 27).

Questar shall consult with CDFG to determine whether site-specific mitigation is required under the California Endangered Species Act or other applicable regulations for disturbance to the coastal sage scrub habitat. (From Biological Opinion - Proposed Minimization Measures, item 29, page 27).

Mitigation for the coastal California gnatcatcher will focus on the avoidance of potential habitat during the breeding season, if preconstruction surveys or on-site observations indicate the presence of this species. Non-emergency project construction activities will be restricted in coastal California gnatcatcher habitat between March 1 and September 1. A buffer of 300 feet will be established in coastal sage scrub habitat, if birds are present. (From Biological Opinion - Proposed Minimization Measures, item 30, page 27).

All encounters with listed species will be reported to the authorized biologist. For gnatcatcher encounters, the following information will be reported: (1) Location; (2) date and time of observation; and (3) response of bird to activity. (From Biological Opinion - Terms and Conditions, item 6b, page 71).

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – The cumulative effects of disturbance, displacement of individual animals, and habitat fragmentation could exert additional pressure on sensitive wildlife species. Even though all individual projects would mitigate these habitat disturbances with revegetation measures, the residual cumulative impacts on the habitats of special-status species may become significant in the future as additional projects are constructed.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

- B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) and the California Department of Fish and Game (CDFG) in addition to the agency making the finding. Such changes have been adopted by such other agencies or can and should be adopted by such other agencies.

Facts Supporting the Finding –Potential construction-related impacts to the coastal California gnatcatcher would include disturbance to birds (if present) from noise and human presence and possible reduction in coastal sage scrub used by this species. Construction at the Beaumont Compressor Station would not adversely affect dense scrub-type riparian habitat used by this species, because the station is located approximately 500 feet away from this habitat type. However, potential habitat is present at 16 unsurveyed excavation sites in California coastal scrub habitat between MPs 29 and 78 (see appendix A of the FEIS/R). The implementation of mitigation measures T&E/mm-10 through T&E/mm-14 would assure that impacts to the coastal California gnatcatcher are less than significant because, if coastal California gnatcatchers were found during surveys in the vicinity of any project work areas, work would not be authorized in those areas between February 15 and August 15.

On July 28, 2000, FERC issued its Certificate of Public Convenience and Necessity (CPCN) to Questar. In its Biological/Conference Opinion (BO) for the project, dated September 22, 2000, the USFWS concluded that:

"After reviewing the current status of the listed species, the environmental baseline for the action area, the effects of the activities associated with conversion of the existing crude-oil pipeline to natural gas service, and the cumulative effects, it is the Service's biological/conference opinion that the proposed project is not likely to jeopardize the continued existence of the desert tortoise, triple-ribbed milk-vetch, least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, or arroyo southwestern toad, and is not likely to destroy or adversely modify designated critical habitat for the desert tortoise (Chemehuevi unit) or proposed critical habitat for the coastal California gnatcatcher and arroyo southwestern toad."

Impact: T & E 5 – Threatened or Endangered Species

Construction in or near least Bell's vireo habitat during the breeding season could impact nesting and foraging birds.

Mitigation Measure

T & E/mm-15 - QST would avoid construction at the Beaumont Compressor Station and the excavation site at MP 109.72 during the breeding season (March 1 through August 15) for the least Bell's Vireo. If construction must be

conducted at these sites during the breeding season, QST would survey these areas according to FWS protocol. If no least Bell's vireos are present at the site, construction could proceed, depending on the results of other required surveys. If the species is present, QST would suspend construction at the site(s) until the end of breeding season or until the FERC staff reinitiates and completes consultation with the FWS.

T & E/mm-16 - Project-committed mitigation measures are provided by QST (see section 5.5.2 and appendix E-1 of the FEIS/R). In addition, mitigation measures identified in the FWS as a part its BO, will be complied with by Questar.

As stated, in part, on page 5-52 of the FEIS/R: "Implementation of the mitigation measures described in Appendix E-1, the reasonable and prudent measures contained in the FWS Biological Opinion would adequately address the potential effects to the species that have been identified that may be affected by project surface-disturbing activities associated with project operation and maintenance. As a result of these measures, the effects to federally listed, state-listed species would be less than significant.

The mitigation measures contained in the BO dated September 22, 2000, are:

At Milepost 109.72, construction activities will not occur during the nesting season for least Bell's vireo (March 15 through September 15). No construction within Big Morongo Canyon will occur between March 15 and September 15. (From Biological Opinion - Proposed Minimization Measures, item 24a, page 23).

Compensation for the area disturbed will be made by restoring another area of potential southwestern willow flycatcher or least Bell's vireo habitat along the same riparian area at a 2:1 ratio (10,000 square feet). The area to be restored will be chosen with the approval of BLM (Robin Kobaly) and the FWS, and will be near the area that is disturbed by the work. The restoration plan should consist of native riparian species and be approved by BLM (Robin Kobaly) and the FWS, with the same success criteria as outlined in FERC'S Wetland and Waterbody Construction and Mitigation Procedures. (From Biological Opinion - Proposed Minimization Measures, item 24m, page 26).

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – The cumulative effects of disturbance, displacement of individual animals, and habitat fragmentation could exert additional pressure on sensitive wildlife species. Even though all individual projects would mitigate these habitat disturbances with revegetation measures, the residual cumulative impacts on the habitats

of special-status species may become significant in the future as additional projects are constructed.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – Potential construction impacts on the least Bell's vireo could include displacement or disturbance to birds during nesting and foraging. The Beaumont Compressor Station and the excavation site at MP 109.7 are located within and area that contains suitable habitat for this species. Construction activities at the existing compressor station would occur along a paved road, which would not affect habitat for this species. Additional riparian areas representing suitable habitat are located in Whitewater Canyon, about 4 miles east of the Cabazon Reroute. The implementation of mitigation measures T&E/mm-15 and T&E/mm-16 would assure that impacts to the least Bell's vireo are less than significant because, if least Bell's vireos were found during surveys in the vicinity of any project work areas, work would not be authorized in those areas between March 1 and August 15.

On July 28, 2000, FERC issued its Certificate of Public Convenience and Necessity (CPCN) to Questar. In its Biological/Conference Opinion (BO) for the project, dated September 22, 2000, the USFWS concluded that:

"After reviewing the current status of the listed species, the environmental baseline for the action area, the effects of the activities associated with conversion of the existing crude-oil pipeline to natural gas service, and the cumulative effects, it is the Service's biological/conference opinion that the proposed project is not likely to jeopardize the continued existence of the desert tortoise, triple-ribbed milk-vetch, least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, or arroyo southwestern toad, and is not likely to destroy or adversely modify designated critical habitat for the desert tortoise (Chemehuevi unit) or proposed critical habitat for the coastal California gnatcatcher and arroyo southwestern toad."

Impact: T & E 6 –Threatened or Endangered Species

The project could affect a total of 33 threatened, endangered, or sensitive species that could occur in California wash habitats (see FEIS/R section 4.5 and appendix D). Construction activities could result in disturbance of habitat, displacement of individuals, or other impact on these species.

Mitigation Measure

T & E/mm-17 - Project-committed mitigation measures are provided by QST (see section 5.5.2 and appendix E-1 of the FEIS/R). QST will obtain a California Endangered Species Act (CESA) permit if the project has the potential to result in a "take" off CESA-listed species during construction. QST would also consult with the CDFG to implement the necessary monitoring and mitigation measures to protect these species, including plants listed as rare under the Native Plant Protection Act. Additional surveys may be required, as discussed in T & E 1/mm2.

T & E/mm-18 - See conditions 28 through 36 in chapter 7.0 of the FEIS/R.

As stated, in part, on page 5-52 of the FEIS/R: "Implementation of the mitigation measures described in Appendix E-1, the reasonable and prudent measures contained in the FWS Biological Opinion would adequately address the potential effects to the species that have been identified that may be affected by project surface-disturbing activities associated with project operation and maintenance. As a result of these measures, the effects to federally listed, state-listed species would be less than significant.

The mitigation measures contained in the BO dated September 22, 2000, are:

All of the mitigation measures set forth in all preceding Threatened or Endangered Species Impact References (CEQA Mitigation Numbers T&E 1 through T&E 5), as well as the following Impact Reference (CEQA Mitigation Number 7) are designed to protect threatened, endangered, and sensitive species that could occur in California wash habitats.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – The cumulative effects of disturbance, displacement of individual animals, and habitat fragmentation could exert additional pressure on sensitive wildlife species. Even though all individual projects would mitigate these habitat disturbances with revegetation measures, the residual cumulative impacts on the habitats of special-status species may become significant in the future as additional projects are constructed.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) and the California Department of Fish

and Game (CDFG) in addition to the agency making the finding. Such changes have been adopted by such other agencies or can and should be adopted by such other agencies.

Facts Supporting the Finding – Construction in California wash habitats could potentially affect seven federally listed species (Coachella Valley milk-vetch, triple-ribbed milk-vetch, coast California gnatcatcher, southwestern willow flycatcher, least Bell's vireo, desert tortoise, burrowing owl, and Coachella Valley fringe-toed lizard) and an additional 25 California-listed or sensitive species. Potential impacts to the federally listed species are described in section 5.5.2.1 of the FEIS/R and in the BA that has been prepared by the FERC and submitted to the FWS for Section 7 consultation. See tables 5-2 and D-7 of the FEIS/R.

In general, construction-related impacts for a particular species would be similar to those discussed for plants, fish, or their appropriate wildlife category (i.e., birds, mammals, amphibians, or reptiles). While more detailed surveys usually are needed to confirm if amphibian, reptile, or small mammal sensitive species are present, in this instance the short-duration of construction and the relatively small area of disturbance does not warrant additional surveys for most species in these wildlife groups.

The general mitigation measures listed in FEIS/R appendix E-1 also would apply to all sensitive species. The implementation of the general mitigation measures identified in FEIS/R appendix E-1, and ongoing consultation with responsible agencies to avoid or reduce effects to individuals or habitats of these species would result in less than significant effects.

On July 28, 2000, FERC issued its Certificate of Public Convenience and Necessity (CPCN) to Questar. In its Biological/Conference Opinion (BO) for the project, dated September 22, 2000, the USFWS concluded that:

"After reviewing the current status of the listed species, the environmental baseline for the action area, the effects of the activities associated with conversion of the existing crude-oil pipeline to natural gas service, and the cumulative effects, it is the Service's biological/conference opinion that the proposed project is not likely to jeopardize the continued existence of the desert tortoise, triple-ribbed milk-vetch, least Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, or arroyo southwestern toad, and is not likely to destroy or adversely modify designated critical habitat for the desert tortoise (Chemehuevi unit) or proposed critical habitat for the coastal California gnatcatcher and arroyo southwestern toad."

Impact: T&E 7 – Threatened or Endangered Species

Construction activities in or near Arroyo toad habitat could affect or result in takes of Arroyo toads.

Mitigation Measure

As stated, in part, on page 5-52 of the FEIS/R: "Implementation of the mitigation measures described in Appendix E-1, the reasonable and prudent measures contained in the FWS Biological Opinion would adequately address the potential effects to the species that have been identified that may be affected by project surface-disturbing activities associated with project operation and maintenance. As a result of these measures, the effects to federally listed, state-listed species would be less than significant.

The mitigation measures contained in the BO dated September 22, 2000, are:

An authorized biologist will inspect the construction area for Mileposts 98.32 and 98.89 immediately prior to any construction activity. Prior to any construction activity, an authorized biologist will conduct an education session for personnel involved in the project. If any arroyo toads are found during the preconstruction inspection or during construction, the qualified biologist will relocate the toads out of the project area and into nearby suitable habitat. As part of the project report, the qualified biologist will provide documentation of the number of arroyo toads, if any, removed from the project area, date and time of capture, specific location of capture, approximate size and age of individuals, and description of relocation sites.

For construction activities within arroyo toad habitat: Open pipeline trenches, auger holes, or other excavations greater than 1-foot deep will be inspected by an authorized biologist once in the morning before construction begins for the day, periodically throughout the day, once at the end of the day, and immediately prior to backfilling. Pipe segments will be capped or closed each night. Such pipe segments will be inspected regularly before sealing. For open trenches, earthen escape ramps with 2:1 or lesser slopes will be maintained at least every 0.25 mile along open trenches and at each end. Other excavations that remain open overnight will be covered or ramped to prevent entrapment of wildlife. If QST determines that covering such excavations is not practicable, such excavation sites shall be completely enclosed with temporary tortoise-proof fencing.

No equipment maintenance, such as adding fuel, oil, coolant, or any other such activities, shall be allowed within 300 feet of the stream channel. No construction equipment will be authorized off the designated access routes or staging areas. Material stockpiling, equipment storage, and vehicle parking will be permitted only in areas of prior disturbance, to be approved by the Service and CDFG.

Exclusion fencing (e.g., silt fencing) will be installed around the site perimeters for Mileposts 98.32 and 98.89 if construction continues past 1 day, to prevent movements by toads into the construction site during the night.

At Mileposts 98.32 and 98.89, the top 1 foot of topsoil will be segregated during excavation, and following repair of the pipe, shall be replaced on the surface in its original location.

No work will begin at Mileposts 98.32 and 98.89 within 3 days following rain, to decrease the likelihood of encountering active toads.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – The cumulative effects of disturbance, displacement of individual animals, and habitat fragmentation could exert additional pressure on sensitive wildlife species. Even though all individual projects would mitigate these habitat disturbances with revegetation measures, the residual cumulative impacts on the habitats of special-status species may become significant in the future as additional electrical generation and utility projects are constructed.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) and the California Department of Fish and Game (CDFG) in addition to the agency making the finding. Such changes have been adopted by such other agencies or can and should be adopted by such other agencies.

Facts Supporting the Finding- Potential construction- related impacts to the arroyo toad would be the potential loss of adult and juvenile individuals that occupy stream or channel crossing areas during the construction period. Adult or juvenile toads could move into the construction zone while foraging during the night. Channel substrates and pools required for egg-laying and juvenile toad development could be modified by construction in the channel and adjacent channel banks. Implementation of the elements of mitigation measure T&E/mm19 would insure that: toads were discovered and removed from the work area; toads would be prevented from entering the work area from adjacent habitat; and channel substrate would be replaced to match the adjacent channel habitat so that there would not be a loss of suitable toad habitat.

On July 28, 2000, FERC issued its Certificate of Public Convenience and Necessity (CPCN) to Questar. In its Biological/Conference Opinion (BO) for the project, dated September 22, 2000, the USFWS concluded that:

"After reviewing the current status of the listed species, the environmental baseline for the action area, the effects of the activities associated with conversion of the existing crude-oil pipeline to natural gas service, and the cumulative effects, it is the Service's

biological/conference opinion that the proposed project is not likely to jeopardize the continued existence of the desert tortoise, triple-ribbed milk-vetch, lease Bell's vireo, southwestern willow flycatcher, coastal California gnatcatcher, or arroyo southwestern toad, and is not likely to destroy or adversely modify designated critical habitat for the desert tortoise (Chemehuevi unit) or proposed critical habitat for the coastal California gnatcatcher and arroyo southwestern toad."

F. Wetlands

Impact: WET 1 - Wetlands

Conversion and construction of project components where wetland delineations have not been conducted could result in filling or altering a not-yet-identified wetland, which could result in a long-term change in hydrology, soils, or the composition of vegetation.

Mitigation Measure

WET/mm-1 - Prior to construction, QST would complete wetland delineations for all project components that have not yet been surveyed, including:

- a. all extra work areas, staging areas, and access roads;*
- b. all excavation sites; and*
- c. any additional areas not previously surveyed at the Mohave Valley or Morongo Valley Compressor Stations.*

QST would conduct the delineations using the current Federal methodology.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – Impacts would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – Although QST has identified and delineated the boundaries of wetlands along the majority of the proposed pipeline and compressor station work sites, it has not completed all of its surveys. Currently, conversion and construction of the proposed project components would not impact any previously identified wetlands in California.

Impact: WET 2 - Wetlands

Limiting width of ROW disturbance in wetlands during construction.

Mitigation Measure

WET/mm-2 - QST would reduce its construction ROW within wetlands to a maximum of 75 feet. If a construction ROW in excess of the 75 feet is needed, QST would submit a site-specific request, with appropriate supporting justification, for review and approval by the Director of OEP.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – Although adopting the FERC Procedures, several of QST's filings appear to envision a 100-foot-wide ROW in wetland areas. To date, QST has not provided sufficient justification for deviating from the requirement to reduce ROW widths in wetlands to no more than 75 feet. Nevertheless, to the extent that QST wishes to use a site-specific alternative to a particular measure in the FERC's Procedures, and the alternative provides equivalent or better protection to wetland or waterbody resources, the FERC staff would consider QST's proposal. Alternative measures which meet the equivalent-or-better-protection goal of the Procedures are acted on wither during the environmental analysis (by way of the FERC Certificate), or later by review and written approval of FERC's Director of OEP.

Cumulative Discussion – To date, no wetlands associated with construction locations have been identified in California.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – Construction through any wetlands would comply, at a minimum, with nationwide Section 404 permit conditions. QST expects to use Nationwide Permit 12 under Section 404 of the CWA. In addition, QST would apply for

any appropriate state-issued wetland-crossing permits and obtain Section 401 water quality certifications or waivers.

G. Land Use

Impact: LAND 1 – Land Use Conflict

A new railroad spur proposed by a truss manufacturing company may conflict with the proposed Cabazon Reroute.

Mitigation Measure

LAND/mm-1 - QST would continue consultations with the owners of the planned truss manufacturing facility in Cabazon, California, concerning the facility's proposed railroad spur and alignment of the Cabazon Reroute, and prepare a plan outlining measures which both parties agree to implement to avoid construction conflicts between the railroad spur and the pipeline, and to limit overall construction impact.

QST shall file this plan with the FERC Secretary and provide copies of any pertinent correspondence with the truss manufacturing facility regarding additional consultations/plan preparation.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – Impacts would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – As the result with consultations with local governments and public scoping for the FEIS/R, a potential conflict with a new railroad spur proposed by a truss manufacturing company was identified in the area of the proposed Cabazon Reroute. This concern was brought to QST's attention during scoping. QST has included consideration of this railroad spur in its pipeline design plans. To date, QST has met with representatives of the manufacturing facility and intends to

coordinate pipeline design and location in the vicinity of the manufacturing facility with the facility's owner.

Impact: LAND 2 – Residential Construction

Approximately 210 residences in California would be within 50 feet of construction work areas, which could result in property damage, construction-related hazards, and other inconveniences to residents.

Mitigation Measure - The mitigation measures recommended in the July 2000 FEIS/R are given as follows:

LAND/mm-2 - Prior to construction, QST would prepare a Residential Construction Plan (RCP) for residences that are within 50 feet of the construction area. In addition to site-specific measures designed to reduce impact and inconvenience to affected residents, the RCP would include the following minimum features. QST would:

1. *not remove mature trees and landscaping within the edge of the construction work area, unless necessary for safe operation of construction equipment;*
2. *immediately after backfilling the trench, restore all lawn areas and landscaping within the construction work area consistent with the requirements of the FERC's Plan;*
3. *fence the edge of the construction area adjacent to the residence for a distance of 100 feet on either side of the residence to ensure that construction equipment and materials, including the spoil pile, remain within the construction work area;*
4. *try to maintain a minimum distance of 25 feet between the residence and the edge of the construction work area; and*
5. *submit a site-specific plan with the FERC for review and written approval of the Director of OEP for any residence (or group of residences within reasonable proximity to one another) closer than 25 feet to the construction work area. The plan would include:*
 - a. *a description of construction techniques to be used (such as pipeline separation, centerline adjustment, use of a stove-pipe or drag-section techniques, working over existing pipelines, pipeline crossover, bore, etc.) and a dimensioned site plan that shows:*
 1. *the location of the residence in relation to the new pipeline and, where appropriate, the existing pipelines;*
 2. *the edge of the construction work area;*

3. *the edge of the new permanent ROW; and*
 4. *other nearby residences, structures, roads, or waterbodies.*
- b. *a description of how QST would ensure the trench is not excavated until the pipe is ready for installation and the trench is backfilled immediately after pipe installation;*
 - c. *evidence of landowner concurrence if the construction work area and fencing would be located within 10 feet of the residence; and*
 - d. *a description of landowner/occupant notification procedures.*

The RCP should be filed with the FERC for review and written approval of the Director of OEP before construction begins.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – Route variations were evaluated to reduce impacts on site-specific resources (e.g., residences) and to resolve localized issues (e.g., landowner requests). Most of the replacements proposed by QST are extremely short segments of pipe, on the order of 100 feet long. Because of their limited scope and purpose, routing variations for the replacements would not result in significantly different impacts and were therefore not developed.

Each of the proposed Corona Realignments, which occur in residential areas, are approximately 105 feet long. These realignments are proposed to facilitate QST's inspection and maintenance of the pipeline with minimal disruption to the residents. It would not be practical to relocate such short segments any farther from the existing ROW than absolutely necessary to avoid the encroaching structures. Thus, these segments would be constructed only 5 to 10 feet away from the existing pipeline alignment. No variations to the proposed routing of these realignments were examined.

QST proposes two reroutes: about 0.8 mile at the City of Orange and about 8.5 miles at Cabazon. In the City of Orange, residential structures have severely encroached on QST's existing ROW, and alternatives to the proposed reroute are limited by the density of development. Inspections revealed no better alternative to, or variation of, QST's proposed reroute within Orange-Olive Road and Lincoln Avenue. As a result, no variation to the City of Orange Reroute was developed.

Route variations were considered for the Del Amo Extension. On the extreme western end of the system, three main routes were initially examined between the existing Line 90 and the ARCO Watson Refinery. These routes involved various combinations of existing streets, utility corridors, and railroad corridors. Routes that included segments of Alameda Street were eliminated because the Alameda corridor is considered full of utilities and closed to further construction. A preliminary route was selected using

Wilmington Street, which QST later learned was unable to accommodate another pipeline. Other routes considered would have involved a directional drill of the Los Angeles River, and resulted in substantial excavation disturbances associated with bore pits and soil storage. For these reasons, the route variations which QST considered during development of its proposed Del Amo Extension were eliminated from further consideration in our analysis. The preliminary route was subsequently modified to include Santa Fe Avenue and the Wardlow-223rd Street corridor, and became QST's initially proposed Del Amo Extension (hereinafter referred to as the Railroad Variation).

Cumulative Discussion – Impacts would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – It is not possible to avoid a level of impact on residential and commercial areas, because the beginning and ending point of the pipeline extension are fixed by the ARCO refinery and Line 90. QST selected its proposed alignment to be the shortest, most direct, and practicable route possible in order to reduce impacts to residential and commercial areas, but would simply shift impact elsewhere. Additionally, other routes would likely be longer, increasing the number of residences and businesses affected.

During public scoping, citizen and agency commentators expressed public safety concerns about QST's proposal to install a pipeline on the Long Beach Boulevard railroad trestle and along the railroad ROW between the trestle and the Los Angeles River crossing, as well as construction impacts on residential areas and residential access (primarily the Sleepy Hollow neighborhood, immediately east of the river and south of the railroad ROW). As a consequence, QST revised its proposal to avoid the Long Beach trestle and railroad ROW by continuing westward along Del Amo Boulevard to the Los Angeles River, then southwards along the east side of the river (within the Los Angeles River Floodplain Corridor) to rejoin its initially proposed route.

Impact LAND 3 – Business access during construction

Construction of the Del Amo Extension could create access problems to the Mitsui-Soko (U.S.A.) Inc. warehouse and distribution business (as well as other businesses and residences on the cul-de-sac portion of Dominguez Street) in Carson, California.

Mitigation Measure

LAND/mm-3 - Prior to construction, QST would consult with Mitsui-Soko to develop a plan that specifically defines the construction areas, expected construction duration, and how construction access along Dominguez Street to the Mitsui-Soko facility (and other businesses and residences) would be maintained during construction.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – Because the beginning and ending point of the pipeline extension are fixed by the ARCO refinery and Line 90, it is not possible to avoid a level of impact on residential and commercial areas. However, because 1) Dominguez Street is a cul-de-sac and is the only way this business can be accessed; 2) even a minor length of time could affect the viability of this business; and 3) QST has not specifically responded to this letter or proposed specific measures to avoid or minimize access problems at this location, we believe that there remains cause for concern.

Cumulative Discussion – Impacts would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

Facts Supporting the Finding – Some commercial/industrial land would be affected by construction of the pipeline and aboveground facilities. These activities could cause disruption, inconvenience, loss of potential revenues, and permanent or long-term impact as a result of the limitation of some future uses of the operational ROW. Temporary impacts would be minimized either by providing access across the construction ROW during construction or by timing construction activities to avoid normal peak business periods.

Impact: LAND 4 – Historic Land Use Concerns

The proximity of Del Amo Extension construction (between approximate MPs DA 5.0 and DA 5.5) and excavation site 2 construction (MP 5.85) to closed landfills in Carson, California, results in concern that there could be methane gas in the trench, which may be explosive or flammable and construction activities could result in an explosion or fire.

Mitigation Measure

LAND/mm-4 - During construction in these areas, QST would employ the use of appropriate equipment to detect explosive/flammable conditions in the trench during construction between MPs DA 5.0 and 5.5 of the Del Amo Extension and during all activities at excavation site 2 (MP 5.85). If explosive or flammable levels of methane (>10% of the lower explosive limit [LEL]) or any other gas/vapor are detected, work would cease immediately, and appropriate measures implemented to assure safe working conditions. These measures could include a passive technique, such as waiting until the gas concentrations drop below 10% of the LEL, or an active technique, such as introducing large fans into the trench to dissipate the gas/vapor to acceptable levels.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – Impact would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

Facts Supporting the Finding – Comments were received from the County of Los Angeles regarding the possibility of encountering methane gas in the soil during construction of the Del Amo Extension and at excavation site 2. Because this could create a danger of explosion or fire during construction, mitigation measures described above were recommended.

H. Cultural Resources

Impact: CUL 1 – Cultural Resources

During construction, significant cultural resources could be destroyed or damaged, have their character or settings changed, or their integrity diminished as described in FEIS/R section 5.9.1.

Mitigation Measure

CUL/mm-1 - FERC would ensure that QST defer construction, conversion, replacement, removal, modification, and use of facilities; staging, storage, and temporary work areas; and new or to-be-improved access roads in any given area until:

1. QST files with the FERC Secretary all remaining cultural resources survey and evaluation reports, any other appropriate studies (such as Traditional Cultural Properties [TCP] studies), and any required avoidance or treatment plans;
2. QST submits the comments of the State Historic Preservation Office(s) (SHPOs), affected Federal and/or state land managing agencies, as appropriate, and other interested parties, as applicable, on all reports, studies, and plans; and
3. FERC's Director of OEP reviews and approves all cultural resources reports, studies, and plans, and notifies QST in writing that construction may proceed.

All material filed with the FERC containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "CONTAINS PRIVILEGED INFORMATION - DO NOT RELEASE."

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – Impact(s) would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – Section 106 of the National Historic Preservation Act (NHPA), as amended, requires the FERC to take into account the effects of its undertakings on properties on, or eligible for listing in, the National Register of Historic Places and to afford the Advisory Committee on Historic Preservation (ACHP) an opportunity to comment. The FERC has requested that QST, as a non-Federal party, assist in meeting the FERC's obligations under Section 106 by preparing the necessary information and analyses as required by ACHP procedures at 36 CFR 800.

To date, QST has identified a total of 69 prehistoric and historic resources within the surveyed area of the entire proposed route, including 22 sites (two of which contain a TCP component) and 47 isolates. QST has recommended 13 additional prehistoric and historic sites (including two TCPs) as "potentially eligible." To date, the California SHPO and the California Desert District BLM office have both reviewed and commented on the

surveys. The California Desert District BLM requested minor revisions and indicated that, in their opinion, Site 1-1 did not merit recordation and evaluation as an archaeological site. The Fort Mojave Indian Tribe had questions and requested additional information and studies. The California SHPO indicated that it would defer comment until receiving a finding from the FERC. QST had recently submitted an addendum report for California to the FERC, the California SHPO, and the BLM. This report is currently under review.

The FERC will ensure that QST complete the inventory and evaluation of all appropriate portions of the project, including ancillary areas in compliance with Section 106. If the proposed project would adversely affect historic properties, the FERC would require QST to prepare and implement treatment plan(s) which provide for the mitigation of adverse effects. The treatment plan(s) would require review and approval by the FERC, the affected SHPO(s), and Federal and/or state land managing agencies, prior to implementation. Implementation of the treatment plan(s) would occur only after the FERC certification of the proposed project, and would be completed before construction of that portion of the project were to begin.

Compliance with Section 106 of the NHPA (National Historic Preservation Act) is not complete for the project. The FERC will ensure that the appropriate consultations under Section 106 of the NHPA are completed prior to issuing construction authorization in any given area.

Impact: CUL 2 – Cultural Resources

Cultural resources, including human remains, could be discovered that were not identified during pre-construction surveys.

Mitigation Measure

CUL/mm-2 - Prior to construction, QST would submit with the FERC Secretary any additional comments by the SHPOs, affected Native Americans, affected Federal and state land managing agencies, and cooperating agencies on the unanticipated discoveries plan.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – Impact(s) would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – It is possible that cultural resources, including human remains, could be discovered during construction that were not identified during the surveys. To address this issue, QST prepared an unanticipated discovery plan as part of its FERC application. This plan outlined the processes of notification, evaluation, and mitigation should unanticipated cultural resources be found during construction. The FERC has requested revisions to the plan and requested that QST provide the plan to the SHPOs, affected Native Americans, affected federal and state land managing agencies, and cooperating agencies. QST provided the revised plan to the FERC, the SHPOs, the BLM, The Hopi Tribe, the Navajo Nation, and the Fort Mojave Indian Tribe, all of whom commented on the plan. QST made additional revisions to the plan and resubmitted it to these parties. This plan was included in the FEIS/R as appendix H.

Impact: CUL 3 – Cultural Resources

There are a number of Native American groups who may have an interest in the project area.

Mitigation Measure

CUL/mm-3 - Prior to construction, QST would submit to the FERC Secretary any additional comments on the project by any of the 23 Native American groups contacted, or any newly identified groups. All material filed with the FERC containing location, character, and ownership information about cultural resources must have the cover and any relevant pages therein clearly labeled in bold lettering: "CONTAINS PRIVILEGED INFORMATION - DO NOT RELEASE."

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – Impact(s) would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the

finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – To assist the FERC in complying with Section 106 of the NHPA and the American Indian Religious Freedom Act, QST has contacted 23 Native American groups. Because Federal and tribal lands are involved in the proposed project, the Native American Graves Protection and Repatriation Act (NAGPRA) also would apply for those lands. The NAGPRA establishes a process for the respectful treatment and disposition of Native American human remains and associated funerary objects, sacred items, and objects of cultural patrimony, intentionally excavated or inadvertently discovered on Federal or tribal lands. This process involves consultation with Native Americans to determine the appropriate tribes' ownership or control of the burial/object, and repatriation of human remains and objects processed or controlled by Federal agencies or museums. The Federal land managing agency would be responsible for compliance with the NAGPRA on Federal land. The NAGPRA implementing regulations can be found at 43 CFR 10. The Federal land managing agency also would be responsible for Executive Order 10037 (Protection and Accommodation of Access to "Indian Sacred Sites"), which applies to Federal land. The Presidential memorandum on government-to-government relations outlines principles that executive departments and agencies are to follow in their interactions with Native American tribal governments. To date, written comments have been received from the Navajo Nation, the Hopi Tribe, the Fort Mojave Indian Tribe, the Gabrieleno-Tongva Tribal Council, and the Gabrieleno-Tongva Indians of California. Concerns included interest in cultural resources, including TCPs, general cultural concerns and concerns about damage to archeological inventory and ethnographic surveys and copies of any archaeological survey reports.

I. Noise

Impact: NOISE 1 – Compressor Station Noise

Noise attributable to construction activities and the operation of the proposed compressor stations could exceed an L_{dn} of 55 dBA, or other local noise ordinance standards, at nearby noise sensitive areas (NSAs).

Mitigation Measure

NOISE/mm-1 - QST would conduct noise level surveys at the Beaumont, Morongo Valley, Mohave Valley, Cameron, Red Mesa, and Shiprock Compressor Stations to verify that the noise from each compressor station operated at full load does not exceed an L_{dn} of 55 dBA at the nearby NSAs, and file the results of the noise survey with the FERC Secretary no later than 60 days after placing the compressor station in service.. If the noise attributable to the operation of each station at full load exceeds an L_{dn} of 55 dBA at any nearby NSAs, QST would install additional noise controls to meet that level within 1 year of the in-service date. QST would confirm compliance with the L_{dn} of 55 dBA requirement by

submitting a second noise survey with the FERC Secretary no later than 60 days after it installs the additional noise controls. See FEIS/R section 5.10.2.3.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternative is suggested.

Cumulative Discussion – Impact would be location-specific and not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – During the operation of the pipeline, increases in noise levels would be primarily limited to areas in the vicinity of the compressor stations. Six of the seven compressor stations would be located at sites previously occupied by ARCO pumping stations. Principal noise sources at the compressor stations would include the air inlet, exhaust, and casing of the engine or turbine. Secondary noise sources would include cooling fans, yard piping, and valves. These sources are not expected to bear significance compared to the compressor noise. Noise for the relief valves, blowdown stacks, and emergency electrical generators would be infrequent. the amount of silencing required for the equipment and piping is dependent on the station's location, size, and proximity to NSAs. Noise impact from the compressor units can be reduced, if necessary, by using more building insulation, installing acoustic louvers, improving the inlet and exhaust silencers, or using special oil coolers. The amount of noise reduction depends on the extent of noise mitigation measures installed.

The EPA has determined that, in order to protect the public from activity interference and annoyance, noise levels should not exceed an L_{dn} of 55 dBA in residential areas. This criterion has been adopted by the FERC and is used in the FEIS/R's evaluation.

QST estimated noise impacts for the proposed equipment, based on the manufacturer's power output levels for the equipment and subsequent calculation of noise attenuation between the compressors and respective NSAs. Noise impact analyses were preformed by QWST at Beaumont, Morongo Valley, and Red Mesa compressor stations. Based on this information, no compressor stations would exceed an L_{dn} of 55 dBA at their respective NSAs. As a result, there would be no significant impact on the existing noise environment.

QST has committed to meet San Bernardino County's noise standards at the Morongo Valley Compressor Station (even if these standards are more stringent than 55 dBA).

QST has committed to conducting noise level surveys at each of the compressor stations to ensure compliance with an L_{dn} of 55 dBA. In addition, QST would incorporate appropriate noise control measures (i.e., silencers, acoustically rated doors, additional building insulation, silenced ventilation system) at any station that is found to exceed this level, based on acoustical engineering studies during full-load operations.

QST has not indicated a time schedule as to when it would file the noise surveys.

J. Transportation and Traffic

Impact: TRANS 1 – Traffic

Construction in city streets could significantly disrupt traffic.

Mitigation Measure

TRANS/mm-1 - Traffic Management Plans (TMPs) are required by local municipalities where construction is to occur in city streets. TMPs would be reviewed and approved by each municipality. See section 5.11.2.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – Route variations were evaluated to reduce impacts on site-specific resources and to resolve localized issues. At the proposed excavation and replacement sites in rural locations, the small number of construction vehicles would not adversely affect existing traffic. QST would provide traffic control personnel to insure that public access is maintained along roads parallel to the proposed ROW.

In highly urbanized areas of southern California, the potential for significant impacts on major traffic networks is more likely. As a result, the FEIS/R analyzed the proposed Del Amo Extension, the City of Orange Reroute, and the general issue of excavation sites in urban streets.

Cumulative Discussion – Impact would be location-specific and of relatively short duration and, therefore, are not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

Facts Supporting the Finding – A comparison of current traffic volumes and the number of lanes available indicates that all but one roadway (i.e., Dominguez Street) have

at least four lanes available and two roadways have six travel lanes available. The FEIS/R evaluation indicated that there are five roadways (Wardlow Street, 223rd Street, Santa Fe Avenue, Orange-Olive Road, and Lincoln Avenue) that would exceed loss-of-service (LOS "E") over the short-term (less than 30 days). Since the period of construction may be less than 30 days, these impacts are less than significant, but any one or all of the local agencies with permitting authority would likely require mitigation in order to issue a construction permit. Therefore, even though this project may not cause an impact technically defined as significant, the project nevertheless faces potential mitigation in the form of conditions imposed by the various local agencies.

Each city in southern California would require TMPs for each roadway segment. These plans detail precisely how traffic would be accommodated during construction to ensure over-capacity situations are avoided. This would be accomplished through such measures as limiting work to only non-peak periods, requiring that the pipeline trench be backfilled or covered with steel plating at the end of the day's (or night's) work and the work area opened up for traffic during peak periods. It is possible that only one lane and the existing median (or an available shoulder or curb parking lane) would be lost resulting in more than two lanes being available for work particularly if work is restricted during peak periods and the work area reopened for traffic. For example, on Del Amo Boulevard, much of the pipeline would be placed in the number three westbound lane located 32 to 37 feet north of the centerline. This construction location would not affect eastbound traffic and would enable two westbound lanes to be maintained at all times. Similarly, the pipeline would be constructed within the number one westbound lane of Wardlow Street, 9 feet away from the median. Such construction would not affect eastbound traffic, but would limit the westbound flow to a single lane. Therefore, since construction on this street could be prohibited during peak periods, no short-term impact is anticipated. A preliminary TMP submittal to the City of Orange by QST includes these types of work restrictions. Similar restrictions can be anticipated from the cities of Long Beach, Lakewood, and Carson.

Whether it is considered mitigation for a significant construction impact or merely acknowledging and accepting local authority to impose conditions on a construction permit, QST would need to prepare TMPs which show how traffic would be managed on the roadways during construction. There are various means to accomplish this, but limiting actual construction to non-peak periods and re-opening all or a portion of the work area to traffic at the end of the day's work would almost certainly be elements of these TMPs.

K. System Reliability and Safety

Impact: SAFE 1 – (Pipeline Safety)

The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas.

Conversion, construction, operation, and maintenance could involve the use or disposal of materials that pose a hazard to people, animal, or plant populations in the exposed areas.

Mitigation Measure

SAFE/mm-1 - The proposed pipeline and associated facilities would be designed, constructed, tested, operated, inspected, and maintained in accordance with DOT Minimum Federal Safety Standards (49 CFR Part 192) and other applicable Federal and state regulations; the same standards that apply to all natural gas facilities in the U.S. These regulations are intended to ensure adequate protection for the public and to prevent natural gas pipeline accidents and failures.

Residual Impacts – Implementation of the above mitigation measure would reduce the impact to a less than significant level.

Alternative Discussion – No alternatives are suggested.

Cumulative Discussion – Impacts are not expected to contribute to cumulative impact.

Finding – A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.

– B. Such changes or alterations are within the responsibility and jurisdiction of the Federal Energy Regulatory Commission (FERC) in addition to the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

Facts Supporting the Finding – The Part 192 regulations represent the primary, minimum pipeline safety standards applied in California. Among other design standards, Part 192 specifies pipeline material selection and qualification, minimum design requirements, and protection from internal, external, and atmospheric corrosion. Part 192 also defines area classifications (class locations), based on population density in the vicinity of the pipeline, which determine more rigorous safety requirements for populated areas. Class locations also specify the maximum distance to sectionalizing block valves, pipe wall thickness and pipeline design pressures, hydrostatic test pressures, maximum allowable operating pressure, inspection and testing of welds, and frequency of pipeline patrols and leak surveys.

Tests of pipeline integrity have been completed in California, and additional tests will be completed prior, and after the converted pipeline has been placed in service. Prior to sale of the pipeline by ARCO to QST, ARCO conducted an internal inspection of pipeline integrity, described in the FEIS/R (pages 2-34 and 2-35) as the "Pipetronix" survey. This survey consisted of inserting an inspection pig into the pipeline. The pig was pushed

through the pipeline by the flow of crude oil. The inspection pig measured the distance between the inside and outside wall of the pipeline around the pipe circumference to measure corrosion. The data from this survey were used to define the areas where pipeline sections needed replacement, and to establish the maximum allowable operating pressure in California. In addition the Pipetronix survey was used to: 1) locate other pipe defects (dents and wrinkles, laminations) that failed to meet the Part 192 standards; and 2) identify other crude oil pipeline attachments and appurtenances such as valves, drains, and tie-ins that needed to be removed because they were incompatible with natural gas service. These repair locations are identified in Table A-1 Excavation Sites, and these locations are also shown in the FEIS/R map volume.

Prior to operating the pipeline in natural gas service, the pipeline must be pressure tested with water (hydrostatic testing) throughout the entire system. This testing must be conducted in accordance with DOT requirements.

After the pipeline is in service, the entire pipeline in California will be inspected using a "smart pig" within 3 years after the pipeline is placed in service. This "smart pig" will inspect for corrosion, dents, wrinkles, and out-of-round pipe conditions. This within-3-year inspection requirement has been included as a CSLC lease condition.

Considerations of public safety were carefully addressed in the evaluation of alternatives associated with the Del Amo Extension. Input from residents of the Sleepy Hollow community in Long Beach concerning access for emergency response was considered in selecting the new proposed route along Del Amo as the preferred alternative for the pipeline in the Long Beach area, rather than following a route along an existing railroad embankment (and parallel to the Sleepy Hollow community)

In addition to the four remotely controlled and continuously monitored shut off valves at the ARCO refinery and at the three compressor stations in California, QST will install nine automatic line break valves in the urban areas of Southern California. These valves will provide an additional level of shut down capability in the event of a major emergency, including an earthquake. These automatic block valves are designed to shut down in response to pressure changes in the pipeline, and do not require human intervention to close these valves. Each of these automatic shut off valves will be placed upstream of known historically active fault and fault zone crossings in Southern California to address the areas of greatest fault movement risk.

EXHIBIT E

MITIGATION MONITORING PROGRAM

**Table ES-1-Revised November 21, 2000
Impact Summary Table and Mitigation Monitoring Program
for the Proposed Southern Trails Pipeline Project**

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
GEOLOGY						
GEO 1	(Mineral Resources) Construction activities at excavation sites at MPs 30.75 and 31.11 in California could conflict with quarry operations.	Significant (CEQA Class 2)	Prior to construction, QST would consult with the quarry operator to develop a cooperative agreement which specifically defines the construction area, expected construction duration, construction access, and restoration plans (see section 5.1.2, Mineral Resources).	Less than significant (CEQA Class 3)	Written cooperative agreement with quarry operator filed with the FERC and CSLC prior to construction.	FERC, CSLC
GEO 2	(Paleontological Resources) Construction activities could result in damage or disturbance to vertebrate and invertebrate fossils in California and New Mexico that are considered to have scientific importance by land management agencies.	Significant (CEQA Class 2)	QST has developed a <i>Paleontological Resources Mitigation Plan (PRMP)</i> , as described in Section 5.1.2, Paleontological Resources.	Less than significant (CEQA Class 3)	Documentation of permits for surveys and removals filed with the FERC and CSLC within 60 days of project in-service date. Field survey reports filed with the FERC and CSLC within 60 days of project in-service date. Notification of significant findings filed with the FERC and CSLC within 60 days of project in-service date. Documentation of recovery activities and mitigation measures implemented filed with the FERC and CSLC within 60 days of project in-service date. Final paleontologic report filed with the FERC and CSLC within 60 days of project in-service date.	FERC, BLM, CSLC

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
GEO 3	(Geologic Hazards) Earthquakes in California could potentially damage the pipeline, however, design standards minimize the risk.	Significant (CEQA Class 1)	<p>QST is required to, and has certified that it would, design, construct, test, operate, inspect, and maintain its facilities in accordance with the DOT safety standards (see regulations in 49 CFR Part 192, <i>Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards</i>).</p> <p>QST is required to, and has, submitted a Seismologic Hazards Evaluation and Mitigation Plan (SHEMP) which includes:</p> <ul style="list-style-type: none"> • site-specific seismic hazard investigations at each of the 24 fault zones crossed or paralleled by the existing pipeline and pipeline modifications, including the Del Amo Extension, to reduce seismic related impacts, including liquefaction and landslides, on the pipeline in these areas; and • a timetable for implementation of the SHEMP report recommendations before pipeline operation. 	Significant (CEQA Class 1)	<p>QST's certification of compliance with the DOT regulations in 49 CFR Part 192 is included in its FERC application.</p> <p>Prior to construction, QST would file its SHEMP with the FERC and CSLC.</p> <p>QST will file with FERC and CSLC the final design drawings and valve specifications, particularly for the automatic shut off valves, as being "seismically qualified."</p>	FERC, CSLC

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
			<p>QST will install automatically actuated line break valves as follows:</p> <p>Valve 2 (MP DA-2); Valve 4 (MP 10.54); Valve 6 (MP 22.40); Valve 8 (MP 37.98); Valve 10 (MP 53.43); Valve 16 (MP 98.32); Valve 18 (MP 120.00); Valve 19 (MP 127.70); and Valve 20 (MP 140.42) to help reduce potential pipeline damage as a result of seismic activity at fault crossings.</p> <p>The Long Beach Extension will be constructed with 20" dia X 312" wt API 5L X56 line pipe from approximately MP DA-0 to MP DA-2 and from MP DA-3.25 to DA-6.5. The section across the Newport Inglewood Fault area including the existing schools on Del Amo Blvd., the 710 Freeway, the LA River, and Blue Line Rail from approximately MP DA-2 to MP DA-3.25 will be constructed with 20 dia X .375" wt API 5L X60 line pipe.</p> <p>The Orange/Olive Reroute from approximately MP 20.60 to MP 21.75 will be constructed with 16" dia X .375" wt API 5L X56 line pipe.</p> <p>The Cabazon Reroute will be constructed with 16" dia X .312" wt API 5L X56 line pipe from approximately MP 86.7 to MP 87 and from MP 87.5 to MP 93.5. The section of pipeline adjacent to the San Geronio Pass Fault from approximately MP 87 to MP 87.5 will be constructed with 16" dia X .375" wt API 5L X56 line pipe.</p>			

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
			<p>No later than the end of the third year of operation, QST will conduct an internal inspection of the pipeline using a smart pig from the Twenty-Nine Palms Station (approximately MP 141) to the west terminus of the pipeline at the ARCO Watson Refinery.</p> <p>Where the installations described above differ from FERC's project approval of July 28, 2000, QST will obtain written approval from the FERC prior to finalizing its design specifications for the proposed project.</p> <p>If further changes to the project are determined to be necessary to reduce potential seismic risk or service interruptions, QST would file any change(s) and all supporting justification for such change(s) with the FERC and the CSLC, and obtain written approval from the FERC prior to finalizing its design specifications for the proposed project.</p>			
GEO 4	(Geologic Hazard) The 1999 Hector Mine Earthquake could have damaged the existing pipeline.	Significant (CEQA Class 2)	<p>QST would hydrostatically test the entire pipeline (as required by the DOT regulations) to ensure its integrity prior to introducing natural gas.</p> <p>If hydrotesting reveals any damage to the pipeline in this area, QST would prepare a remediation plan to repair the pipeline and to minimize potential damage from future seismic activities near this fault. See section 5.1.2, Geologic Hazards.</p>	Less than significant (CEQA Class 3)	<p>Any hydrostatic test failure would be reported immediately to the FERC (and CSLC, if appropriate).</p> <p>Before receiving authorization to make pipeline repairs in the vicinity of the Hector Mine Fault, QST would prepare and file with the FERC and CSLC a site-specific repair and remediation plan prior to implementation.</p>	FERC, CSLC

Table ES-1 (Continued)

CEQA Mitigation Number (not in CA)	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
	The 1996 internal inspection didn't evaluate the pipeline for corrosion or other damage on the 394 miles proposed for conversion between Kingman Station, Arizona and the Bisti Junction area of New Mexico.	Significant	<p>QST is required and has certified that it would design, construct, test, operate, inspect, and maintain its facilities in accordance with the DOT safety standards (see regulations in 49 CFR Part 192, Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards).</p> <p>QST would hydrostatically test the entire pipeline to ensure its integrity (as required by the DOT regulations) prior to introducing natural gas, and would implement a remediation plan at any site which failed the hydrotest. See section 5.1.2, Geologic Hazards.</p>	Less than significant	<p>Any hydrostatic test failure would be reported immediately to the FERC (and CSLC, if appropriate).</p> <p>Before receiving authorization to make pipeline repairs, QST would prepare and file with the FERC a site-specific repair and remediation plan for each failure, including:</p> <ul style="list-style-type: none"> a plot plan identifying all areas of disturbance associated with the failure and the proposed repairs; a description of the repair activities, and a statement demonstrating compliance with 18 CFR 157.206(b); and all Federal, state, and other appropriate environmental clearances necessary to conduct the repair activities. 	FERC

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
SOILS 1	Construction activities would disturb soils, which could result in temporary increased erosion and reduced soil productivity along portions of the Danby-Ward Replacements, Cabazon Reroute, Hackberry Extension, TransColorado Extension, and Chaco Extension.	Significant (CEQA Class 2)	<p>SOILS</p> <p>Prior to construction, QST would submit a list by MP of all areas having steep slopes (greater than 33 percent) and identify the seed mix and the recommended planting time, as described in Section 5.2.2, Erosion. In the absence of seeding recommendations from the land management agencies or NRCS, QST would seed all disturbed areas within 6 days.</p> <p>QST has adopted the FERC's <i>Upland Erosion Control, Revegetation, and Maintenance Plan</i> (FERC's Plan), which requires post-construction monitoring to assure revegetation success.</p> <p>For construction and access through steeply (in excess of 30 percent) sloped areas and within sand dunes, QST would prepare site-specific plans as described in section 5.2.2, Erosion, prior to construction.</p> <p>QST's <i>Storm Water Pollution Prevention Plan, Blanco TransColorado</i>.</p>	Less than significant (CEQA Class 3)	<p>QST would file with the FERC and CSLC this information prior to construction.</p> <p>CSLC- and BLM-approved site-specific erosion control plans, if necessary, filed with the FERC prior to construction.</p> <p>NNEPA-approved aspects of QST's <i>Storm Water Pollution Prevention Plan Blanco TransColorado</i> applicable to reservation lands filed with the FERC.</p>	FERC, CSLC, BLM, NNEPA
	<i>Upland Erosion Control, Revegetation, and Maintenance Plan</i>					
SOILS 2	Construction activities along the existing pipeline could encounter oil-contaminated soil.	Significant (CEQA Class 2)	Although ARCO retains the responsibility for reclaiming or mitigating sites where oil contamination has occurred during operation of the pipelines in crude oil service, QST would be responsible for any oil or hazardous materials spilled during the conversion of the system. Contaminated soil would be excavated and transported to an approved disposal facility.	Less than significant (CEQA Class 3)	Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements. QST's HMMSPC Plan (EIS/R, appendix C-2). NNEPA provided with	FERC, CSLC, NNEPA

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
			QST has prepared a <i>Hazardous Materials Management and Spill Prevention and Countermeasure Plan</i> (HMMSPC Plan) to avoid or minimize the potential impact of a hazardous material spill and other aspects of handling, transporting, storage, and disposal of hazardous materials. In particular, QST's HMMSPC Plan describes procedures that QST would implement if unexpected or unknown contaminated sites were encountered during construction.		information regarding construction within and remediation of any contaminated sites encountered during pipeline conversion on Navajo Nation lands.	
SOILS 3	Significant soil erosion could occur in construction areas where mulching rates are insufficient.	Significant (CEQA Class 2)	QST and ARCO would consult with the NNEPA regarding construction within and remediation of any contaminated sites encountered during pipeline conversion and construction activities on Navajo Nation lands. See section 5.2.2, Erosion. QST would use a minimum of 2 tons of mulch per acre, unless written recommendations to do otherwise are received from the NRCS, BLM, NNDNR/AD, or the land managing agency (see the FERC's Plan). See section 5.2.2 and appendix B-1.	Less than significant (CEQA Class 3)	Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.	FERC, CSLC

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
SOILS 4	Construction activities at 5 excavation sites (MPs 198.48, 200.17, 217.30, 219.40, 220.20) in San Bernardino County, California could result in hazards to construction workers, since they are located within unexploded ordnance areas.	Significant (CEQA Class 2)	Prior to construction, QST would prepare an <i>Unexploded Ordinance Work Plan</i> (UOWP) that addresses worker safety in areas identified as having unexploded ordnance. This plan would include an evaluation potential risk and, if warranted, procedures QST would use to minimize risk including, but not limited to, having the areas swept by an Army National Guard Explosive Ordnance Disposal Unit. See section 5.2.2, Erosion.	Less than significant (CEQA Class 3)	QST would file its UOWP with the FERC prior to construction.	FERC
(not in CA)	Portions of both the TransColorado and Chaco Extensions traverse soils prone to compaction, with low bedrock, and gravel/rock fragments within trench depth.	Significant	Mitigation measures for soils prone to compaction are described in QST's <i>Soil Resources Management Plan</i> . Specific construction procedures would be used for blasting in low depth-to-bedrock areas. Excess rock would not be windrowed along the ROW unless written approval was obtained from the landowners or land managing agency.	Less than significant	Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.	FERC, NNDNR/AD
(not in CA)	One excavation site would be located within a center-pivot irrigation agricultural field. Agricultural activities at this site may be temporarily affected.	Significant	Topsoil would be segregated in accordance with the FERC's Plan. No prime farmland would be converted to non-agricultural use at this site. See appendix B-1.	Less than significant	Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.	FERC, NNDNR/AD
WATER RESOURCES						
WATER 1	(Groundwater) Potential impact from the pipeline cleaning process on groundwater resources.	Significant (CEQA Class 2)	Prior to construction, QST would submit an Environmental Operating Procedures (EOP) Manual that would detail all waste management procedures for spill containment, cleanup, emergency operations, preparedness, and prevention.	Less than significant (CEQA Class 3)	QST would file this information and its final EOP Manual with the FERC, CSLC, and NNEPA prior to construction.	FERC, CSLC, NNEPA

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
			<p>The EOP also would identify:</p> <ul style="list-style-type: none"> the amounts and types of cleaning chemicals that would be used during the pipeline cleaning operation; how all chemical components of the cleaning train would be stored before use and handled after use; and how all wastes collected from the pipeline during the cleaning operation would be sampled, separated, stored, transported, and recycled or disposed of. See section 5.3.1.2. <p>QST and its cleaning contractor would consult with the NNEPA regarding development of its EOP manual.</p>			
WATER 2	(Groundwater) Vehicle refueling and storage of fuel, oil, and other fluids could potentially contaminate groundwater by exceeding Federal, state, and Tribal water quality standards or water quality objectives.	Significant (CEQA Class 2)	<p>QST prepared its HMMSPC Plan to assemble preventative and mitigative measures that would be used to avoid or minimize the potential impact of a hazardous material spill on groundwater quality. QST's HMMSPC Plan includes:</p> <ul style="list-style-type: none"> fueling restrictions; designation of storage, refueling, staging, and lubrication locations prior to construction; notification procedures; cleanup and disposal actions; typical fuel, lubricants, and 	Less than significant (CEQA Class 3)	<p>QST's HMMSPC Plan (EIS/R, appendix C-2). Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.</p> <p>Hazardous material spills would be reported immediately to the appropriate Federal, state, Tribal, and local authorities.</p>	<p>FERC</p> <p>Appropriate Federal, state, Tribal, and local authorities.</p>

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
			<p>other hazardous materials that may be used or stored in designated areas; and</p> <ul style="list-style-type: none"> the types of containers that would be used for storage. <p>See appendix C-2.</p>			
WATER 3	(Groundwater) Water supply wells in proximity to pipeline construction activities could potentially be damaged by construction or contaminated by fuels or other hazardous materials used during construction.	Significant (CEQA Class 2)	<p>Prior to construction, QST would submit the location by MP of all wells and springs within 150 feet of all construction work areas. For each, QST would</p> <ul style="list-style-type: none"> conduct pre- and post-construction water quality and yield testing of wells used for drinking water within 150 feet of the construction work areas; communicate with the nearby well owners to determine changes in yield and discoloration during construction; provide a temporary potable water supply to well owners whose supply was adversely affected by construction; and repair or, if necessary, replace any municipal or domestic wells located within 150 feet of construction areas that are damaged by construction. See section 5.3.1.2. 	Less than significant (CEQA Class 3)	QST's HMMSPC Plan (EIS/R, appendix C-2). Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.	FERC, CSLC

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
			QST's HMMSPC Plan. In particular, the plan prohibits refueling activities and storage of hazardous materials within at least a 200-foot radius of all private wells and within a 400-foot radius of all municipal or community supply wells. If a spill occurs, the HMMSPC identifies techniques to contain and remove contaminated soil.			
WATER 4	(Surface Water) Vehicle refueling and storage of fuel, oil, and other hazardous materials or fluids could potentially contaminate surface water by exceeding Federally, state, or Tribal water quality standards or water quality objectives.	Significant (CEQA Class 2)	See mitigation for WATER 2 (Groundwater) above. QST's HMMSPC Plan identifies procedures to minimize the chances of a hazardous material spill. In particular, the HMMSPC Plan prohibits refueling activities and storage of hazardous materials within 100 feet of any stream or wetland.	Less than significant (CEQA Class 3)	See documentation for WATER 2 (Groundwater) above.	FERC, CSLC, NNEPA

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
WATER 5	(Surface Water) Construction would cause localized disturbances of the streambanks and to any existing riparian vegetation.	Significant (CEQA Class 2)	Prior to ROW revegetation, erosion would be controlled as described in the FERC Plan and the FERC's <i>Wetland and Waterbody Construction and Mitigation Procedures</i> (FERC Procedures). See appendix B. See Mitigation for VEG 2 and VEG 3 below.	Less than significant (CEQA Class 3)	FERC's Plan and Procedures. Prior to construction, QST would file with the FERC, CSLC, and CDFG a site-specific plan for revegetating any woody riparian vegetation disturbed by construction (see VEG 2). QST would develop agreements with land management agencies for the extent and frequency of woody vegetation management on the ROW (see VEG 3).	CSLC, FERC Appropriate Federal, Tribal, and state land management agencies.
(not in CA)	(Surface Water) Release of drilling fluids to the water column during the directional drill at the San Juan River crossing could be toxic to fish.	Significant	Before attempting a directional drill of the San Juan River, QST would conduct a geotechnical investigation at the crossing location to establish the feasibility of a drilled crossing. QST would evaluate the toxicity of any additives to the bentonite-based drilling mud on sensitive fish species (especially threatened or endangered species in the San Juan River). See section 5.3.2.2.	Less than significant	Prior to directionally drilling the San Juan River, QST would file with the FERC documentation that any additives to its drilling mud would be non-toxic to sensitive fish species (especially endangered species).	FERC, COE, FWS

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
(not in CA)	(Surface Water) The directional drill at the San Juan River could fail, which would result in the need to construct an open-cut crossing.	Significant	<p>If the directional drilling is unsuccessful, QST would file a site-specific construction plan for an open-cut crossing of the San Juan River. This plan would include:</p> <ul style="list-style-type: none"> • scaled drawings identified all areas that would be disturbed by construction, and • mitigation approved by the FWS for the protection of the streambanks, riparian vegetation, and endangered fish species along the San Juan River. <p>QST would submit this plan for review and approval by the FERC concurrent with its application to the COE for Section 404 permit plan. See section 5.3.2.2.</p>	Less than significant	<p>Prior to open-cutting the San Juan River, QST's site-specific construction plan for an open-cut crossing of the San Juan River would be filed with the FERC.</p> <p>FERC's reinitiation of formal consultation with the FWS; a new or revised Biological Opinion, indicating FWS' approval of the construction plan; and QST's adoption of any FWS-recommended mitigation.</p> <p>COE approval of QST's construction plan.</p>	FERC, FWS, COE
(not in CA)	(Surface Water) Water used for hydrostatic testing the existing pipeline may acquire some contaminants and may not meet ambient water quality standards at the proposed discharge location (Red Mesa Compressor Station).	Significant	<p>QST would consult with the NNEPA regarding its spent hydrotest water sampling and testing procedures, test all water to ensure compliance with Navajo Nation permit requirements, and treat any waters found to exceed permit requirements prior to discharge.</p>	Less than significant	<p>Copies of the test data on spent test water would be submitted to NNEPA prior to its discharge or disposal.</p>	NNEPA

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
VEGETATION, WILDLIFE, AND FISHERIES						
VEG 1	(Vegetation) Ground-disturbing construction activities would result in impacts on vegetative communities.	Significant (CEQA Class 2)	In general, impacts to vegetation would be considered temporary (less than 3 to 5 years) because post-construction recovery is expected to occur as a result of implementing erosion control, revegetation and maintenance, and weed control procedures as discussed in QST's <i>Soils Resource Management Plan</i> and the FERC Plan and Procedures, which QST has adopted. QST would use native seed mixtures to revegetate all disturbed areas and would consult with the BLM, Navajo Nation's Division of Natural Resources/Agricultural Department, and the NRCS and other county and state regulatory agencies, as appropriate, to determine seed mixtures, application rates, and optimal seeding periods. In California, the CDFG requested that local genetic material (i.e., seeds, cuttings, propagules, or salvaged material) from similar habitat types within 15 miles would be used. The removal of woody shrubs in unique communities such as riparian, wetlands, and California washes would be considered long-term impacts (greater than 5 years). The same mitigation measures would be applicable to these areas.	Less than significant (CEQA Class 3)	QST would maintain records that identify by milepost the method of application, application rate, and type of fertilizer, pH modifying agent, seed, mulch used, acreage treated, seeding date, and follow-up actions. QST also would submit quarterly activity reports to the FERC documenting problems for at least 2 years following construction.	FERC, BLM, NNDNR/AD, CDFG

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
VEG 2	(Woody Riparian Vegetation) The removal of trees or other woody vegetation in riparian communities and along dry washes would represent potential long-term direct impacts.	Significant (CEQA Class 2)	<p>Prior to construction, QST would develop, in consultation with appropriate Federal, state (including CDFG), and Tribal land managing agencies, a site-specific plan for revegetating any woody riparian areas disturbed by construction. This plan would:</p> <ul style="list-style-type: none"> include measures to avoid the removal of any trees located within areas of disturbance; include measures to avoid or minimize the construction ROW width in woody riparian areas to the maximum extent practicable; include site-specific measures to revegetate any riparian area disturbed during construction to preconstruction condition, including species of similar type, diversity, and density; and prohibit construction staging from disturbing woody riparian areas. 	Less than significant (CEQA Class 3)	<p>Prior to construction, QST's site-specific revegetation plan for any woody riparian areas disturbed by construction would be filed with the FERC, CSLC, and CDFG.</p> <p>Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.</p>	<p>FERC, CSLC, CDFG</p> <p>Appropriate Federal, state, and Tribal land managing agencies.</p>
VEG 3	(Woody Vegetation Maintenance) Pipeline operations and maintenance activities, including the removal of woody vegetation and control of noxious weeds within the ROW, would result in vegetation community disturbance.	Significant (CEQA Class 2)	<p>Prior to construction, QST would consult with Federal, Tribal, and state land management agencies (and the NRCS on private lands) to develop:</p> <ul style="list-style-type: none"> site-specific agreements to eliminate or minimize the extent and frequency of woody vegetation management efforts on the permanent ROW; and a weed management program that identifies the control measures to be used, the frequency of inspections, and the criteria for measuring weed control success. 	Less than significant (CEQA Class 3)	<p>Approval of the plan from the FERC, the CSLC, and land management agencies before plan implementation.</p> <p>Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.</p>	<p>FERC, CSLC, BLM, CDFG</p>

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
VEG 4	(Wetland and Riparian Vegetation) The loss of vegetation in wetlands and riparian areas could indirectly affect wildlife species by reducing cover, food sources, nest sites, and other biological requirements.	Significant (CEQA Class 2)	See Mitigation for VEG 2. Additionally, mitigation for impacts to streambeds in California would be provided by implementation of FERC's Plan and Procedures and a Lake and Streambed Alteration Agreement with CDFG.	Less than significant (CEQA Class 3)	QST's site-specific revegetation plan for any woody riparian areas disturbed by construction Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.	FERC, CSLC, CDFG, and other appropriate Federal, state, and Tribal land managing agencies.
VEG 5	(Vegetation Management) Long-term vegetation management on the ROW could result in impact on soils and wildlife.	Significant (CEQA Class 2)	Prior to construction, QST would consult with Federal, Tribal, and state land management agencies (and the NRCS on private lands) to develop: a. Site-specific agreements for the extent of woody vegetation management and the frequency that control measures will be applied, and b. A weed management program that identifies the control measures to be used, the frequency of inspections, and the criteria for measuring weed control success.	Less than significant (CEQA Class 3)	Plan approval from the FERC, CSLC, other land administering agencies, prior to implementation.	FERC, CSLC, CDFG, and other land administering agencies.
THREATENED, ENDANGERED, AND SPECIAL STATUS SPECIES						
T&E 1 T&E 2 T&E 3 T&E 4 T&E 5 T&E 6 T&E 7	Please see Attachment A for Threatened, Endangered, and Special Status Species Impact References, Mitigation, and Monitoring Requirements					

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
WETLANDS						
WET 1	(Wetlands) Conversion and construction of project components where wetland delineations have not been conducted could result in filling or altering a not-yet-identified wetland, which could result in a long-term change in hydrology, soils, or the composition of vegetation.	Significant (CEQA Class 2)	Prior to construction, QST would complete wetland delineations for all project components that have not yet been surveyed, including: a. all extra work areas, staging areas, and access roads; b. all excavation sites; and c. any additional areas not previously surveyed at the Mohave Valley or Morongo Valley Compressor Stations. QST would conduct the delineations using the current Federal methodology.	Less than significant (CEQA Class 3)	Wetland delineations completed and filed with the FERC prior to construction.	FERC, COE, CDFG
WET 2	(Wetlands) Limiting width of ROW disturbance in wetlands during construction.	Significant (CEQA Class 2)	QST would reduce its construction ROW within wetlands to a maximum of 75 feet. If a construction ROW in excess of the 75 feet is needed, QST would submit a site-specific request, with appropriate supporting justification, for review and approval by the Director of OEP.	Less than significant (CEQA Class 3)	Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.	FERC, CDFG
(not in CA)	(Wetlands) Construction of the TransColorado Extension would temporarily disturb 2.8 acres of identified wetlands. Construction activities could fill or alter a wetland, which could result in a long-term change in hydrology, soils, or the composition of vegetation.	Significant	QST would adhere to the FERC Procedures during construction (section 5.6.2) and comply with its Nationwide Section 404 Permit and/or Individual Permit requirements.	Less than significant	Written notification from the COE. State-issued wetland crossing permits; Section 401 water quality certifications or site-specific waivers. Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.	FERC, COE

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation LAND USE	Significance After Mitigation	Documentation Required	Responsible Agency
LAND 1	(Land Use Conflict) A new railroad spur proposed by a truss manufacturing company may conflict with the proposed Cabazon Reroute.	Significant (CEQA Class 2)	QST would continue consultations with the owners of the planned truss manufacturing facility in Cabazon, California, concerning the facility's proposed railroad spur and alignment of the Cabazon Reroute, and prepare a plan outlining measures which both parties agree to implement to avoid construction conflicts between the railroad spur and the pipeline, and to limit overall construction impact.	Less than significant (CEQA Class 3)	FERC provided with copies of any pertinent truss manufacturing facility and plan to minimize conflicts prior to construction.	FERC
LAND 2	(Residential Construction) Approximately 214 residences would be within 50 feet of construction work areas, which could result in property damage, construction-related hazards, and other inconveniences to residents.	Significant (CEQA Class 2)	Prior to construction, QST would prepare a Residential Construction Plan (RCP) for residences that are within 50 feet of the construction area. In addition to site-specific measures designed to reduce impact and inconvenience to affected residents, the RCP would include the following minimum features. QST would: 1. not remove mature trees and landscaping within the edge of the construction work area, unless necessary for safe operation of construction equipment; 2. immediately after backfilling the trench, restore all lawn areas and landscaping within the construction work area consistent with the requirements of the FERC's Plan;	Less than significant (CEQA Class 3)	QST's RCP filed with the FERC prior to construction. QST's site-specific plans for residences closer than 25 feet to construction work areas filed with the FERC prior to construction. Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.	FERC

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
			<p>3. fence the edge of the construction area adjacent to the residence for a distance of 100 feet on either side of the residence to ensure that construction equipment and materials, including the spoil pile, remain within the construction work area;</p> <p>4. try to maintain a minimum distance of 25 feet between the residence and the edge of the construction area, and submit a <i>site-specific</i> plan for any residence (or group of residences within reasonable proximity to one another) closer than 25 feet to the construction work area. The plan would include:</p> <p>a. a description of construction techniques to be used and a dimensioned site plan that shows:</p> <ol style="list-style-type: none"> 1. the location of the residence in relation to the new pipeline and, where appropriate, the existing pipelines; 2. the edge of the construction work area; 3. the edge of the new permanent ROW; and 4. other nearby residences, structures, roads, or waterbodies. 			

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
			<p>b. a description of how QST would ensure the trench is not excavated until the pipe is ready for installation and the trench is backfilled immediately after pipe installation; and</p> <p>c. evidence of landowner concurrence if the construction work area and fencing would be located within 10 feet of the residence.</p> <p>d. a description of landowner/occupant notification procedures.</p>			
LAND 3	<p>(Business Access during construction) Construction of the Del Amo Extension could create access problems to the Mitsui-Soko (U.S.A.) Inc. warehouse and distribution business (as well as other businesses and residences on the cul-de-sac portion of Dominguez Street) in Carson, California.</p>	Significant (CEQA Class 2)	Prior to construction, QST would consult with Mitsui-Soko to develop a plan that specifically defines the construction areas, expected construction duration, and how construction access along Dominguez Street to the Mitsui-Soko facility (and other businesses and residences) would be maintained during construction.	Less than significant (CEQA Class 3)	Written cooperative agreement with Mitsui-Soko filed with FERC and CSLC prior to construction.	FERC, CSLC
LAND 4	<p>(Historic Land Use concerns) The proximity of Del Amo Extension construction (between approximate MPs DA 5.0 and DA 5.5) and excavation site 2 construction (MP 5.85) to closed landfills in Carson, California, results in concern that there could be methane gas in the trench, which may be explosive or flammable and construction activities could result in an explosion or fire.</p>	Significant (CEQA Class 2)	<p>During construction in these areas, QST would employ the use of appropriate equipment to detect explosive/flammable conditions in the trench during construction between MPs DA 5.0 and 5.5 of the Del Amo Extension and during all activities at excavation site 2 (MP 5.85). If explosive or flammable levels of methane (> 10% of the LEL) or any other gas/vapor are detected, work should cease immediately, and appropriate measures implemented to assure safe</p>	Less than significant (CEQA Class 3)	<p>Documentation from required onsite monitoring and reporting by the Environmental Inspector demonstrating adherence to the required condition of the Certificate.</p> <p>Documentation would be collected during construction inspections.</p>	FERC, CSLC

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
			working conditions. These measures could include a passive technique, such as waiting until the gas concentrations drop below 10% of the lower explosive limit (LEL), or an active technique, such as introducing large fans into the trench to dissipate the gas/vapor to acceptable levels.			
LAND 5	(Visual Resources) Additional mitigation for visual effects of other aboveground facilities on BLM-managed lands (includes valves and meter stations).	Significant (CEQA Class 2)	Mitigation would include painting standards, the use of non-glare materials, and shielding for night lighting.	Less than significant (CEQA Class 3)	Documentation provided to BLM as part of QST's ROW grant application. Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.	BLM
(not in CA)	(Agricultural Productivity) Construction across NAPI agricultural areas in San Juan County, New Mexico, along the TransColorado Extension could result in the loss of standing crops from within the construction ROW (approximately 130 acres) for one season, and possible loss of future crop productivity.	Significant	QST would adhere to its <i>Soil Resources Management Plan</i> and the FERC Plan during construction (see section 5.7.1.2).	Less than significant	QST submits quarterly reports documenting problems and corrective actions taken for at least 2 years following construction. Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.	FERC

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
(not in CA)	(Residential Construction on Navajo Nation) Four residences within 50 feet of work areas occur on Navajo Nation lands. Construction could damage property, create a hazard, and other inconveniences to residents.	Significant	Prior to construction, QST would prepare a Navajo Nation RCP, in consultation with the appropriate Navajo Chapters, the Navajo Nation Department of Emergency Management, and other appropriate tribal entities.	Less than significant	QST's Navajo Nation RCP filed with NNEPA. Site-specific plans for residences closer than 25 feet to construction work areas. Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.	Navajo Nation
(not in CA)	(Visually Sensitive Excavations) Six excavation sites between MP 260 and MP 270 would be located within 0.25 mile of the historic U.S. Highway 66 corridor between Kingman and Oatman, Arizona, and may be visible from the road.	Significant	Prior to construction, QST would consult with the BLM's Kingman Rangeland Management Specialist to determine the site-specific revegetation mixtures for these local excavation disturbances on BLM-administered land. Other measures, such as replacing excavated rocks with the dark (desert varnish) side up, or artificially staining rocks to match the color of adjacent rock outcrops would require BLM approval prior to implementation. See section 5.7.2, Visual Resources.	Less than significant	BLM-approved revegetation mixtures and rock replacement procedures filed with the FERC prior to construction. Documentation would be collected during construction and post-construction inspections, and QST's post-construction reporting requirements.	FERC, BLM
(not in CA)	(Visual Resources) The new Mohave Valley Compressor Station may be visible from a residential area on the Fort Mojave Indian Reservation, but is not expected to dominate the viewshed from sensitive locations or change the character of the landscape.	Significant	QST provided a plan to the BLM for mitigating the potential visual effects of the new Mohave Valley Compressor Station. This plan included painting standards, the use of non-glare materials, and shielding for night lighting.	Less than significant	FERC and BLM were provided with a plan for mitigating visual effects of the Mohave Valley Compressor Station.	FERC, BLM

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
CULTURAL RESOURCES						
CUL 1	(Cultural Resources) During construction, significant cultural resources could be destroyed or damaged, have their character or settings changed, or their integrity diminished as described in section 5.9.1.	Significant (CEQA Class 2)	<p>FERC would ensure that QST defer construction, conversion, replacement, removal, modification, and use of facilities; staging, storage, and temporary work areas; and new or to-be-improved access roads in any given area until:</p> <ol style="list-style-type: none"> 1. QST submits all remaining cultural resources survey and evaluation reports, any other appropriate studies (such as Traditional Cultural Properties studies), and any required avoidance or treatment plans; 2. QST submits the comments of the SHPO(s), affected Federal and/or state land managing agencies, the Navajo Nation and Hopi Tribe, as appropriate, and other interested parties, as applicable, on all reports, studies, and plans; and 3. FERC's Director of OEP reviews and approves all cultural resources reports, studies, and plans, and notifies QST in writing that construction may proceed. 	Less than significant (CEQA Class 3)	<p>QST files remaining cultural resources survey and evaluation reports, studies, and any required avoidance or treatment plans with the FERC.</p> <p>QST files the comments of the SHPO(s), affected parties on all reports, studies, and plans with the FERC.</p> <p>FERC issues written notification that QST may proceed with construction.</p> <p>Prior to construction, QST files with the FERC and CSLC evidence of a contract(s) with Native American monitors.</p>	FERC, CSLC, CA SHPO
CUL 2	(Cultural Resources) Cultural resources, including human remains, could be discovered that were not identified during pre-construction surveys.	Significant (CEQA Class 2)	Prior to construction, QST would submit any additional comments by the SHPOs, affected Native Americans, affected Federal and state land managing agencies, and cooperating agencies, on the unanticipated discoveries plan.	Less than significant (CEQA Class 3)	Prior to construction, QST files with the FERC and CSLC any comments by SHPOs, affected Native Americans, affected Federal and state land managing agencies, and cooperating agencies on the plan.	FERC, CSLC, CA SHPO

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
CUL 3	(Cultural Resources) There are a number of groups who may have an interest in the project area.	Significant (CEQA Class 2)	Prior to construction, QST would submit any additional comments on the project by any of the 23 Native American groups contacted, or any newly identified groups.	Less than significant (CEQA Class 3)	Prior to construction, QST files with the FERC and CSLC any comments by all potentially affected tribes.	FERC, CSLC, CA SHPO
NOISE						
NOISE 1	(Compressor Station Noise) Noise attributable to construction activities and the operation of the proposed compressor stations could exceed an L_{dn} of 55 dBA, or other local noise ordinance standards, at nearby NSAs.	Significant (CEQA Class 2)	QST would conduct noise level surveys at the Beaumont, Morongo Valley, Mohave Valley, Cameron, Red Mesa, and Shiprock Compressor Stations to verify that the noise from each compressor station operated at full load does not exceed an L_{dn} of 55 dBA at the nearby NSAs. If the noise attributable to the operation of each station at full load exceeds an L_{dn} of 55 dBA at any nearby NSAs, QST would install additional noise controls. QST would confirm compliance with the L_{dn} of 55 dBA requirement by submitting a second noise survey after it installs the additional noise controls. See section 5.10.2.3.	Less than significant (CEQA Class 3)	Noise level surveys at compressor stations to verify compliance with noise limits filed with the FERC, CSLC, and any appropriate local government agencies within 60 days of placing compressor stations in service.	FERC, CSLC, appropriate local agencies
TRANSPORTATION AND TRAFFIC						
TRANS 1	(Traffic) Construction in city streets could significantly disrupt traffic.	Significant (CEQA Class 2)	Traffic Management Plans (TMPs) are required by local municipalities where construction is to occur in city streets. TMPs would be reviewed and approved by each municipality. See section 5.11.2.	Less than significant (CEQA Class 3)	Written approval of TMPs from each affected municipality filed with the FERC prior to construction.	FERC, affected local municipalities
SYSTEM RELIABILITY AND SAFETY						
SAFE 1	(Pipeline Safety) The transportation of natural gas by pipeline involves some risk to the public in the event of an accident and subsequent release of gas. Conversion, construction,	Significant (CEQA Class 2)	The proposed pipeline and associated facilities would be designed, constructed, tested, operated, inspected, and maintained in accordance with DOT Minimum Federal Safety Standards (49 CFR Part 192); the same standards that apply to all	Less than significant (CEQA Class 3)	FERC provided with video documentation and other installation documentation to ensure construction adheres to Federal regulations	FERC

Table ES-1 (Continued)

CEQA Mitigation Number	Impact Reference ¹	Significance Before Mitigation ²	Mitigation	Significance After Mitigation	Documentation Required	Responsible Agency
	operation, and maintenance could involve the use or disposal of materials that pose a hazard to people, animal, or plant populations in the exposed areas.		<p>natural gas facilities in the U.S. These regulations are intended to ensure adequate protection for the public and to prevent natural gas pipeline accidents and failures.</p> <p>QST would submit a SHMP, including:</p> <ul style="list-style-type: none"> a site-specific seismic hazard investigation of the Del Amo Extension's crossing of the Newport-Inglewood fault zone and an appropriate crossing design to mitigate seismic hazards at this location. site-specific seismic hazard investigations at each of the 14 fault zones crossed or paralleled by the existing pipeline; and seismic hazard investigations at all pipeline segments identified as being at risk from liquefaction hazards. See section 5.1.2, Geologic Hazards. <p>Additionally, QST has prepared a HMMSPC Plan, which outlines how hazardous materials would be handled.</p>			

Notes:

- No significant resource impacts were identified for Air Quality, Socioeconomics, or Cumulative and Growth Inducing Impacts.
- CEQA Significance Classifications;
 Class 1 = a significant impact that cannot be mitigated to non-significance
 Class 2 = a significant impact, but one that can be mitigated to non-significance with the application of appropriate mitigation measures.
 Class 3 = a non-significant impact
 Class 4 = a beneficial impact

Table ES-1

Mitigation Monitoring Program

**Threatened, Endangered, and Special Status Species Impact
References, Mitigation Measures, and Monitoring Requirements
Section**

CEQA Mitigation Number: T&E 1

Impact Reference: Threatened or Endangered Species

Construction activities could result in temporary disturbance to habitat, displacement of individuals, or other impact on special status species. Included are 27 federally listed species, 1 species proposed for Federal listing, 2 Federal candidate species, as well as state-listed species and those listed as species of concern by other agencies (see sections 4.5, 5.5, and appendix E). Types of impacts would be similar to those expected on plants, fish, or the appropriate wildlife group.

Significance Before Mitigation: Significant (CEQA Class 2)

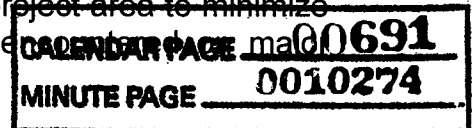
Mitigation: Project-committed mitigation measures are provided by QST (see section 5.5.2 and appendix E-1). Additional surveys may be required, as discussed at the end of section 5.5.2.1, Federally Listed Species.

QST will develop and implement an environmental education and compliance program acceptable to the agencies prior to the start of work. All employees and contractors working in the field will be required to complete this program as part of their duties. The program will include discussions of the biology, distribution, and ecology of special status listed species within the geographic area of project sites; protection afforded such species under applicable Federal and State laws and regulations; all protection measures that must be followed to protect such species during project activities; penalties for noncompliance; reporting requirements; and the importance of compliance with all protection measures. (From FEIS/R, Appendix E-1, item 1, page E-1-1 and Biological Opinion - Proposed Minimization Measures, item 1, page 18 and Terms and Conditions, item 1a, page 64).

QST will hire and designate at least one Environmental Inspector per construction spread who will be responsible for overseeing project environmental protection measures. (From FEIS/R, Appendix E-1, item 2, page E-1-1 and Biological Opinion - Proposed Minimization Measures, item 2, page 18).

QST will hire and designate at least one Environmental Inspector per construction spread who will be responsible for overseeing project environmental protection measures. The Environmental Inspector could be an authorized biologist, environmental coordinator, project manager, or some other appropriate individual. QST's Environmental Inspector and authorized biologist will have the authority to halt all non-emergency actions that might result in the harm to a listed species, and will assist in the overall implementation of protection measures for listed species during project operations. (From Biological Opinion - Terms and Conditions, item 6a, page 71).

Project personnel will exercise caution when commuting to the project area to minimize any chance for the inadvertent injury or mortality of species.



roads leading to and from the project site. QST's contractors and employees will report all incidents directly to the Environmental Inspector and authorized biologist. (From FEIS/R, Appendix E-1, item 3, page E-1-1 and Biological Opinion - Proposed Minimization Measures, item 3, page 18, and Terms and Conditions, item 1b, page 65).

Existing routes of travel will be used to and from specific project sites. Cross-country travel by maintenance vehicles and equipment will be prohibited. Except on county-maintained roads, vehicle and equipment speed limits will not exceed 25 miles (40 km) per hour (MPH) within potential habitat of a listed species. (From FEIS/R, Appendix E-1, item 4, page E-1-1 and Biological Opinion - Proposed Minimization Measures, item 4, page 18, and Terms and Conditions, item 1c, page 65).

Litter will be contained and regularly removed from each area of the project to reduce attractiveness to predators. (From FEIS/R, Appendix E-1, item 5, page E-1-1 and Biological Opinion - Proposed Minimization Measures, item 5, page 18).

Firearms and domestic pets will be prohibited from work sites. (From FEIS/R, Appendix E-1, item 6, page E-1-1 and Biological Opinion - Proposed Minimization Measures, item 6, page 18).

Employees and contractors will look under vehicles and equipment for the presence of protected species prior to movement. No equipment will be moved until the animal has left voluntarily or it is removed by a biologist authorized to do so. (From FEIS/R, Appendix E-1, item 7, page E-1-1 and Biological Opinion - Proposed Minimization Measures, item 7, page 18).

Construction activities between dusk and dawn will be limited to emergencies only (i.e., issues involving human health & safety). (From FEIS/R, Appendix E-1, item 8, page E-1-1 and Biological Opinion - Proposed Minimization Measures, item 8, pages 18 and 19).

All project actions will be confined to existing rights-of-way and other approved areas unless otherwise authorized in writing by the appropriate agencies. The area of disturbance will be the smallest practical, and will consider topography, placement of facilities, location of sensitive burrows, nesting sites or dens, public health and safety, and other pertinent factors. Special habitat features identified by a qualified authorized biologist will be avoided to the extent possible. Work area boundaries will be delineated by posting signs and flagging, erecting temporary fencing, or otherwise clearly marking in order to minimize surface disturbance associated with vehicle or equipment movement. To the extent possible, previously disturbed areas within each component of the project will be used for storage of equipment, parking or vehicles, stockpiling of excavated materials, or any other surface-disturbing activities. The qualified biologist, in consultation with QST's inspectors, will ensure compliance with these measures. All activities that extend outside of the current pipeline right-of-way will require prior approval and review by BLM, the FWS, and appropriate state wildlife agencies. (From FEIS/R, Appendix E-1, item 9, page E-1-1 and E-1-2 and Biological Opinion)

Opinion - Proposed Minimization Measures, item 9, page 20, and Terms and Conditions, item 1f, page 65).

Open pipeline trenches, auger holes, or other excavations that could entrap wildlife will be inspected by an authorized biologist a minimum of three times per day, and immediately prior to backfilling. In habitats supporting listed species, pipe segments will be capped or taped closed each night. Such pipe segments will be inspected regularly before sealing. For open trenches, earthen escape ramps will be maintained at appropriate intervals. Other excavations that remain open overnight will be covered or ramped to prevent entrapment of wildlife. (From FEIS/R, Appendix E-1, item 10, page E-1-2 and Biological Opinion - Proposed Minimization Measures, item 10, page 20).

With the exception of fenced facilities, all unused materials and equipment will be removed from the area upon completion of work. (From FEIS/R, Appendix E-1, item 11, page E-1-2 and Biological Opinion - Proposed Minimization Measures, item 11, page 20).

At the conclusion of work, all trenches and holes will be completely filled, surfaces cleaned and smoothed, and each site recontoured to match the original profiles as closely as possible. (From FEIS/R, Appendix E-1, item 12, page E-1-2 and Biological Opinion - Proposed Minimization Measures, item 12, page 20, and Terms and Conditions, item 3a, page 69).

A pre-activity survey of each project component located within listed and special status species habitat will be conducted by an authorized biologist no more than 14 days prior to the onset of activities. All burrows of any protected wildlife species or locations of any protected plants identified during surveys outside of, but near, the pipeline right-of-way, will be flagged prominently so they can be avoided during work activities. Silt fencing or other semi-permanent fencing materials will be erected around such listed plant sites to maximize protection during project construction. Project actions will avoid disturbing such sites to the extent possible. However, if it would become necessary to disturb sensitive areas, plants (except for those that are federally protected) will be transplanted and/or seeds will be collected for reseeding following consultation with appropriate State and Federal agencies, and burrows will be carefully excavated using hand tools under the direct supervision of an authorized biologist, allowing any animals in residence to escape unharmed. (From FEIS/R, Appendix E-1, item 14, page E-1-2 and Biological Opinion - Proposed Minimization Measures, item 13, pages 20 and 21).

All work where prior surveys have documented the occurrence of one or more listed species, will be monitored by qualified biologists. In conjunction with QST's Environmental Inspector, the biologist will have the authority to halt all non-emergency actions that might result in harm to a listed species, and will assist in the overall implementation of protection measures for listed and special status species during project operations. (From FEIS/R, Appendix E-1, item 13, page E-1-2 and Biological Opinion - Proposed Minimization Measures, item 14, page 21).

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If a listed species is located during construction, and a contingency for avoidance, removal, or transplant has not been approved by the FWS or appropriate agency, QST will not proceed with project activity until specific consultation with the FWS and other appropriate agency is completed. (From FEIS/R, Appendix E-1, item 15, page E-1-3 and Biological Opinion - Proposed Minimization Measures, item 15, page 21).

If pre-construction surveys by an authorized biologist record the presence of an active nest of any listed bird species, project action will be deferred until monitoring by qualified biologists has determined that young birds have fledged and left the nest. Any such nests will also be strictly protected during the subsequent project action. (From FEIS/R, Appendix E-1, item 16, page E-1-3 and Biological Opinion - Proposed Minimization Measures, item 16, page 21).

All encounters with listed and special status species will be reported to the biologist, who will record the following information:

- type of species;
- location (narrative and maps) and dates of observations;
- general condition and health, including injuries and state of healing;
- diagnostic markings, including identification numbers or marks; and
- locations moved from and to (if authorized).

(From FEIS/R, Appendix E-1, item 17, page E-1-3 and Biological Opinion - Proposed Minimization Measures, item 17, page 21).

Employees will be notified that they are not authorized to handle or otherwise move listed species either commuting to work sites or at a work site. (From FEIS/R, Appendix E-1, item 18, page E-1-3 and Biological Opinion - Proposed Minimization Measures, item 18, page 21).

Upon locating a dead or injured protected or special status protected species, QST will notify the FWS and appropriate State wildlife agency. Written notification must be made within 15 days of the date and time of the finding or incident (if known), and must include: Location of the carcass, a photograph, cause of death (if known), and other pertinent information. Injured animals will be transported to a qualified veterinarian for treatment at the expense of QST. If an injured animal recovers, the FWS and appropriate State wildlife agency will be contacted for final disposition of the animal. (From FEIS/R, Appendix E-1, item 19, page E-1-3 and Biological Opinion - Proposed Minimization Measures, item 19, pages 21 and 22).

Upon completion of project activities, QST will submit a standardized report to the FERC for distribution to the other agencies, including the FWS. The report will document the effectiveness and practicality of the mitigation/conservation measures, the number of individuals of each species excavated from their homes or removed from the site, the number of individuals killed or injured, and other pertinent information. The report also will also make recommendations for modifying the stimulation in order to

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enhance species protection in the future. The final report will provide the actual acreage disturbed by project activities. (From FEIS/R, Appendix E-1, item20, page E-1-3 and Biological Opinion - Proposed Minimization Measures, item 20, page 23).

In the event that a wild fire is started as the result of a Southern Trails pipeline gas release, emergency response actions will be initiated in accordance with the project Emergency Response plan mandated under USDOT Part 192. After the incident is controlled, QST will consult with the FWS and other jurisdictional agencies to determine the extent of injury to special status species and populations. If injury is determined to have occurred, procedures for habitat and population recovery will be identified and implemented in proportion to the level of injury identified. (From FEIS/R, Appendix E-1, item21, pages E-1-3 and E-1-4).

For emergencies involving a spill or other action that extends beyond the pipeline right-of-way, QST will implement containment measures detailed in its Hazardous Materials Management and Spill Prevention and Countermeasure Plan, on file with the FERC (Appendix C2, FERC and CSLC 2000a). As a part of this process, QST will immediately notify the FWS, BLM, and the appropriate State wildlife and environmental agencies. After containment and during cleanup, these agencies may require specific measures for the protection and recovery of listed and special status species and their habitats. (From FEIS/R, Appendix E-1, item22, page E-1-4 and Biological Opinion - Proposed Minimization Measures, item 21, page 23).

The choice of materials and mesh sizes for erosion control blankets would be determined through discussion with CDFG. Daily monitoring of erosion control blankets will be conducted by a qualified biologist to determine the presence of entrapped animal species. (From FEIS/R, Appendix E-1, item23, page E-1-4).

QST shall consult with the appropriate BLM and CDFG offices regarding compensation requirements and obtain a Consistency Determination, if necessary, from CDFG under section 2080.1 of the Fish and Game Code. (From Biological Opinion - Proposed Minimization Measures, item 23, page 23).

Any pruning of shrubs *while accessing, or while at the Big Morongo Canyon Site* will leave the roots and base intact, and plywood sheets will be used to protect the roots and bases while vehicles are driving over them. (From Biological Opinion - Proposed Minimization Measures, item 24d, page 24).

Any rocks and earth moved to gain access to the Big Morongo Canyon site, will be moved back to their original location and the area recontoured on the way out of the Canyon at the conclusion of the project. (From Biological Opinion - Proposed Minimization Measures, item 24e, page 24).

Crew members traveling to and from the *Big Morongo Canyon* site will use only one truck, if feasible, to minimize disturbance. (From Biological Opinion - Proposed Minimization Measures, item 24f, page 24).

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The Applicant will identify and discuss with BLM (Robin Kobaly) the exact route to access the *Big Morongo Canyon* project site and specific means to minimize damage to vegetation and adverse effects to wildlife and riparian habitats in the northern portion of the *Big Morongo Canyon*. (From Biological Opinion - Proposed Minimization Measures, item 24g, page 24).

Construction activities will not remove or damage mature willow and cottonwood trees in Big Morongo Canyon. (From Biological Opinion - Proposed Minimization Measures, item 24h, page 24).

Work will be done only in periods of no flow or low flow *in Big Morongo Canyon*. No flow is preferable, but cannot be guaranteed. If flow is present, the stream will be diverted around the work using a flume or other techniques. (From Biological Opinion - Proposed Minimization Measures, item 24i, page 24).

At the Big Morongo Canyon site, only soils over the trench will be stripped of vegetation. The root systems of other vegetation will be left intact. Where the other vegetation is non-native, attempts will be made to eradicate it. If it is determined that crushed vegetation could damage rubber-tired vehicles, the vegetation will be cut off at ground level, otherwise it will not be cut down. (From Biological Opinion - Proposed Minimization Measures, item 24j, page 24).

At the Big Morongo Canyon site, the area to be disturbed for the pipe repair will be minimized and work will be coordinated in such a manner that a minimum amount of time will be necessary to complete the work. The work site will be managed to prevent erosion and sedimentation. (From Biological Opinion - Proposed Minimization Measures, item 24k, pages 24 and 25).

Immediately after the work is completed *at the Big Morongo Canyon site*, weather permitting, the site will be restored by grading the earth back to its original contours, reestablishing the stream and revegetating the site. QST will consult with BLM (Robin Kobaly) and the FWS on the appropriate methods of revegetation and plant species to be used. (From Biological Opinion - Proposed Minimization Measures, item 24l, page 26).

QST will develop a specific plan for the proposed repair in Big Morongo Canyon and have it approved by BLM (Robin Kobaly) prior to the start of the work. (From Biological Opinion - Proposed Minimization Measures, item 24n, page 26).

All work at Mileposts 109.72 and 98.89 will be conducted according to FERC's Wetland and Waterbody Construction and Mitigation Procedures. (From Biological Opinion - Proposed Minimization Measures, item 24o, page 26).

QST shall consult with CDFG to determine whether site-specific mitigation is required under the California Endangered Species Act or other applicable regulations for

disturbance to the coastal sage scrub habitat. (From Biological Opinion - Proposed Minimization Measures, item 29, page 27).

Construction activities within listed species' habitat will occur only during daylight hours with the exception of emergencies that pose a threat to human health or safety. (From Biological Opinion - Terms and Conditions, item 1d, page 65).

Firearms will be prohibited from project sites, except for authorized law enforcement personnel. (From Biological Opinion - Terms and Conditions, item 1o, page 68).

Herbicides shall not be used on the rights-of-way, access roads, pipeline corridors, or fencelines unless approved in writing by the FWS. (From Biological Opinion - Terms and Conditions, item 1p, page 68).

Trash and food items will be disposed of promptly in predator-proof containers with resealable lids. Trash includes, but is not limited to, cigarettes, cigars, gum wrappers, tissue, cans, paper, plastic, and bags. Trash containers will be removed regularly (at least once per week). This effort will reduce the attractiveness of the area to opportunistic predators such as desert kit fox, coyotes, and common ravens. Any construction refuse, including, but not limited to, broken parts, wrapping material, cords, cables, wire, rope, strapping, twine, buckets, metal or plastic containers, boxes, and welding rods will be removed from the site each day and disposed of properly. (From Biological Opinion - Terms and Conditions, item 2, page 68).

To the extent possible, previously disturbed areas within each component of the project will be used for storage of equipment, parking or vehicles, stockpiling of excavated materials, or any other surface-disturbing activities. The authorized biologist, in consultation with QST's inspectors, will ensure compliance with these measures. All activities that extend outside of the current pipeline right-of-way will require prior approval and review by BLM, the FWS, and appropriate state wildlife agency. (From Biological Opinion - Terms and Conditions, item 3b, page 69).

All areas to be disturbed will have boundaries flagged prior to construction, and all disturbances will be confined to the flagged areas. All employees will be instructed that their activities must be confined to locations within the flagged areas. Disturbance beyond the actual construction zone is prohibited. (From Biological Opinion - Terms and Conditions, item 3c, page 69).

Topsoil will be removed to a depth of 6 to 12 inches in all areas of potential, native, seed-bearing soil where ground breaking will take place. The determination of which soils are potentially seed-bearing will be the responsibility of the biological monitor. (From Biological Opinion - Terms and Conditions, item 3d, page 69).

Removed topsoil will be stockpiled in a separate area and designated as "topsoil" to prevent contamination by or combination with other excavated soils. Reasonable measures will be taken to ensure the protection and preservation of the stockpiled

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topsoil to prevent loss of the seed bed from wind and rain or contamination by other soils or manmade contaminants. (From Biological Opinion - Terms and Conditions, item 3e, page 69).

Where topsoil removal or project excavations are not required, any vegetation in the right-of-way will be "bladed off" at ground level or simply crushed to preserve the root systems of the plants. (From Biological Opinion - Terms and Conditions, item 3f, page 69).

Any fuel or hazardous waste leaks or spills will be stopped or repaired immediately and cleaned up at the time of occurrence. Service vehicles will carry a bucket and pads to absorb leaks or spills. (From Biological Opinion - Terms and Conditions, item 3g, page 69).

Contaminated soil will be removed and disposed of at an appropriate facility. If spills occur in a maintenance yard, they will be cleaned up after construction is complete. (From Biological Opinion - Terms and Conditions, item 3h, page 70).

Camping and fires will be prohibited within the project site. (From Biological Opinion - Terms and Conditions, item 3i, page 70).

All waste and leftover materials remaining after construction of this project will be removed from the site after project completion. (From Biological Opinion - Terms and Conditions, item 3j, page 70).

After construction, the project area will be recontoured to match its original contours as much as possible. (From Biological Opinion - Terms and Conditions, item 3k, page 70).

FERC and QST will implement the reclamation plan for the project approved by the FWS and appropriate cooperators (Appendices B and C, FERC and CSLC 2000a). (From Biological Opinion - Terms and Conditions, item 3l, page 70).

Prior to initiation of construction activities, QST shall consult with CDFG and obtain either a Consistency Determination under section 2080.1 or a permit under section 2081 of the California Fish and Game Code. QST shall consult with CDFG and BLM California Desert District Field Office regarding applicable compensation for the loss of 55 acres of desert tortoise and 2.11 acres of coastal California gnatcatcher habitat. (From Biological Opinion - Terms and Conditions, item 3m, page 70).

The authorized biologist will be responsible for determining compliance with mitigation measures as defined by the biological opinion or other agreements between State or Federal agencies. A biological monitor may be employed to assist with the pre-activity surveys and general monitoring efforts. The authorized biologist will have the authority to briefly halt construction activities that are not in compliance with the biological opinion. Construction activities will be halted only long enough to remedy the immediate situation and will apply only to the equipment and parties involved in the

situation. All actions of non-compliance or conditions of threat to federally proposed or listed species will be recorded immediately by the biological monitor and reported to FERC or land management agency. FERC or the agency will immediately report all such actions and conditions to the FWS. (From Biological Opinion - Terms and Conditions, item 6d, page 72).

All fuel or hazardous waste leaks, spills, or releases will be reported immediately to FERC and the Federal agency that administers the land where the incident occurs. (From Biological Opinion - Terms and Conditions, item 6e, page 72).

After completion of construction, a thorough inspection of the work site will be conducted by the authorized biologist to determine the extent of compliance with the conditions of the Biological Opinion. (From Biological Opinion - Terms and Conditions, item 6h, page 73).

Upon completion of the pipeline project, all materials and vehicles/equipment used during the project shall be removed from the project area. Machinery and personnel involved with subsequent reclamation shall be permitted along the corridor during the course of revegetation efforts. Once reclamation measures have been implemented, no associated equipment and supplies will be allowed to remain on-site. (From Biological Opinion - Terms and Conditions, item 6j, page 74).

Significance After Mitigation: Less than significant (CEQA Class 3)

Documentation Required: Documentation from required onsite monitoring and reporting by the Environmental Inspector, demonstrating adherence to mitigation measures detailed in the Mitigation Monitoring Plan, in appendix E-1 of the EIS/R, and in the FWS Biological Opinion (BO).

Responsible Agency: FERC, FWS, CDFG, CSLC

CEQA Mitigation Number: T&E 2

Impact Reference: Threatened or Endangered Species

The project is likely to adversely affect the desert tortoise and triple-ribbed milk-vetch.

Significance Before Mitigation: Significant (CEQA Class 2)

Mitigation: QST has committed to the general mitigation measures provided in appendix E-1 of the EIS/R. Additionally, mitigation measures and compensation for desert tortoise habitat are outlined in the Biological Opinion (BO), which describe reasonable and prudent measures for protecting the desert tortoise and its habitat. The FWS has also included in its BO the results of formal consultation on the triple-ribbed milk-vetch.

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Prior to construction, QST will resurvey the excavation site at MP 109, including the access route, for the occurrence of the triple-ribbed milkvetch according to FWS and CDFG guidelines, and obtain a permit under Section 2081 of the California Fish and Game Code.

QST will obtain a permit under Section 2081 of the California Fish and Game Code for the desert tortoise (Mojave population) prior to construction.

Excavation of desert tortoise burrows that will be affected by project actions will begin up to 14 days prior to the initiation of surface-disturbing activities. When tortoises are active, however, a final check of the project site will occur no more than 24 hours before the onset of work. Only qualified biologists or other specifically trained personnel will handle and safely move tortoises out of harm's way using protocols acceptable to the FWS. (From Biological Opinion - Proposed Minimization Measures, item 22, page 23).

Prior to the onset of construction activities, including driving up to the project site, the specific identified route will be resurveyed for triple-ribbed milk-vetch. Any plant located in close proximity to the access route will be fenced with conspicuously colored snow-fencing to prevent damage or destruction. At the conclusion of construction activities, fencing will be removed. (From Biological Opinion - Proposed Minimization Measures, item 24b, pages 23 and 24).

A biologist experienced in the identification of desert tortoise and dormant triple-ribbed milk-vetch will be present during any project related activities. (From Biological Opinion - Proposed Minimization Measures, item 24c, page 24).

An authorized biologist will conduct preconstruction surveys for desert tortoise and be present during all construction activities at Mileposts 98.32, 98.89, 103.81 and Milepost 105.82 within the Coachella Valley. (From Biological Opinion - Proposed Minimization Measures, item 25, page 26).

Any time a vehicle is parked within desert tortoise habitat, whether the engine is engaged or not, the ground around and underneath the vehicle will be inspected for desert tortoises prior to moving the vehicle. If a desert tortoise is observed, an authorized biologist will be contacted. If possible, the tortoise will be left to move on its own. If the tortoise does not move within 15 minutes, the tortoise will be removed and relocated by the authorized biologist in accordance with the tortoise handling provisions of the biological opinion. (From Biological Opinion - Terms and Conditions, item 1d, page 65).

A pre-activity survey of each project component located within listed species habitat shall be conducted by an authorized biologist no more than 7 days prior to the onset of activities. An authorized biologist(s) will survey the site for desert tortoises using techniques providing 100-percent coverage of the area proposed for disturbance. Transects will be no greater than 10 meters apart. The site boundaries will be flagged prior to the biological survey. All burrows that cannot be avoided will be excavated by

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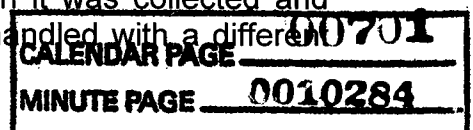
hand. All desert tortoise handling and burrow excavations will be conducted by an authorized desert tortoise biologist in accordance with FWS-approved protocol (Desert Tortoise Council 1994, revised 1999). All burrows of any protected wildlife species or locations of any protected plants identified during surveys outside of, but within 100 meters of the pipeline right-of-way will be flagged prominently so they can be avoided during work activities. Silt fencing or other semi-permanent fencing materials will be erected around such listed species sites to maximize protection during project construction. Project actions will avoid disturbing such sites to the extent possible. At the completion of each installation phase, all materials used to mark or identify the burrows and plant locations shall be promptly removed. (From Biological Opinion - Terms and Conditions, item 1g, page 66).

All potential tortoise burrows found in the construction zone, whether occupied or vacant, will be excavated by an authorized biologist and collapsed or blocked to prevent desert tortoise re-entry. All burrows will be excavated by hand with hand tools to allow removal of desert tortoises or desert tortoise eggs. (From Biological Opinion - Terms and Conditions, item 1h, page 66).

Tortoises and nests found on the project area shall be relocated by an authorized tortoise biologist in accordance with FWS-approved protocol (Desert Tortoise Council 1994, revised 1999). Desert tortoises will be relocated 300 to 1,000 feet into adjacent undisturbed habitat. Handling and disposition of all tortoises handled shall be documented. (From Biological Opinion - Terms and Conditions, item 1i, page 66).

All desert tortoises observed by project workers will be reported immediately to the authorized biologist, who will move the tortoise offsite into adjacent undisturbed habitat. Tortoises will be handled only when necessary, and in accordance with guidelines provided in this biological opinion. Desert tortoises will be moved only by an authorized desert tortoise biologist and solely for the purpose of moving them out of harm's way. Appropriate State permits will be acquired from CDFG prior to handling any live desert tortoise, desert tortoise carcass, or desert tortoise egg. (From Biological Opinion - Terms and Conditions, item 1j, page 66).

All desert tortoises and desert tortoise eggs located in the linear right-of-way will be relocated 300 to 1,000 feet into adjacent undisturbed habitat. Tortoises found above ground will be placed under a marked bush in the shade. A tortoise located in a burrow will be placed in an existing unoccupied burrow of the same size and orientation as the one from which the tortoise was taken. If a suitable natural burrow is unavailable, an authorized biologist will construct one of the same size and orientation as the one from which the tortoise was removed utilizing the protocol for burrow construction in section B.5.f (Desert Tortoise Council 1994, revised 1999). Any tortoise found within 1 hour before nightfall will be placed in a separate clean cardboard box and held overnight in a cool location. The box will be covered and kept upright at all times to minimize stress to the tortoise. Each box will be used once and then disposed of properly. The tortoise will be released the following day in the same area from which it was collected and using the procedures described above. Each tortoise will be handled with a different



pair of disposable latex gloves. After each use, the gloves will be properly discarded and a fresh set used for each subsequent tortoise handling. (From Biological Opinion - Terms and Conditions, item 1k, page 67).

Authorized biologist(s) will be assigned to monitor heavy equipment during construction for the protection of listed species and to monitor compliance with the terms and conditions of this biological opinion. The level of effort involved in this monitoring will be dependent on listed species activity, and for desert tortoise, whether tortoise-proof fencing has been installed around the construction area. (From Biological Opinion - Terms and Conditions, item 1l, page 67).

If blasting is required in desert tortoise habitat, a biological monitor will be assigned to each blasting crew or to each area in which blasting will occur. Prior to any blast, a 200-foot radius around the blast site will be surveyed for desert tortoises using techniques providing 100-percent coverage; transects will be no greater than 10 meters apart. Above-ground tortoises will be relocated at least 500 feet from the blast site. Desert tortoises located in burrows that are within 50 feet of the blast site will be relocated at least 75 feet away from the blast site to an unoccupied existing burrow of the same size and orientation. If a suitable existing burrow is unavailable, an artificial burrow of the same size and orientation will be constructed by an authorized biologist utilizing FWS-approved protocol (Desert Tortoise Council 1994, revised 1999). Burrows either occupied by desert tortoises or with undetermined occupancy status and located 50 feet or further away from the blast site will be flagged and stuffed with newspaper prior to the blast. The newspaper will be removed immediately after the blast and the burrows assessed for damage. The authorized biologist will wear latex disposable gloves to remove the newspaper. The gloves and newspaper will then be disposed of without contact with other items. (From Biological Opinion - Terms and Conditions, item 1m, pages 67 and 68).

Dogs are capable of significant harm to desert tortoises and will be prohibited from the project site. The only exception to this measure will be dogs that are clearly used for security purposes within fenced areas. (From Biological Opinion - Terms and Conditions, item 1n, page 68).

Within desert tortoise habitat, open pipeline trenches, auger holes, or other excavations greater than 1-foot deep will be inspected by an authorized biologist once in the morning before construction begins for the day, periodically throughout the day, once at the end of the day, and immediately prior to backfilling. Pipe segments will be capped or closed each night. Such pipe segments will be inspected regularly before sealing. For open trenches, earthen escape ramps with 2:1 or lesser slopes will be maintained at least every 0.25 mile along open trenches and at each end. Other excavations that remain open overnight will be covered or ramped to prevent entrapment of wildlife. If QST determines that covering such excavations is not practicable, such excavation sites shall be completely enclosed with temporary tortoise-proof fencing. (From Biological Opinion - Terms and Conditions, item 4, page 70).

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All encounters with listed species will be reported to the authorized biologist. (From Biological Opinion - Terms and Conditions, item 6b, pages 71 and 72).

The authorized biologist(s) will maintain a record of each observation of desert tortoise during the project. The information gathered will include the following: (1) Location; (2) date and time of observation; (3) whether the tortoise was handled; (4) general health and whether it voided its bladder; (5) location the tortoise was moved from and location moved to; and (6) any observed unique physical characteristics of each individual. (From Biological Opinion - Terms and Conditions, item 6g, page 73).

An authorized biologist(s) will be present during all phases of construction. In accordance with Procedures for Endangered Species Act Compliance for the Mojave Desert Tortoise (FWS 1992), an authorized biologist should: (1) Possess a bachelor's or graduate degree in biology, ecology, wildlife biology, herpetology, or related fields; (2) demonstrate a minimum of 60 days prior field experience using accepted resource agency techniques to survey for desert tortoises; and (3) have the ability to recognize and to accurately identify and record all types of desert tortoise sign. The FWS does not endorse any individual or company with respect to their abilities to conduct satisfactory surveys. Only the authorized biologist shall be allowed to handle/relocate desert tortoises. FERC shall submit the names and credentials of qualified individuals to the FWS for review and approval at least 15 days prior to the onset of any surface disturbing events. No project-related activities will commence until an authorized biologist has been selected. (From Biological Opinion - Terms and Conditions, item 6c, page 72).

Upon locating dead or injured desert tortoises, the Environmental Inspector will notify FERC or BLM immediately by phone and within 5 days in writing. Initial notification also must be made immediately to the FWS Division of Law Enforcement in Torrance, California, at telephone number 310-328-6307 (facsimile). Written notification to the FWS's Carlsbad Office, at (760) 431-9440 will occur within 15 days of the date of the finding or incident, and will include the following information: (1) Date and time of finding or incident; (2) location of carcass or injured tortoise; (3) a photograph; (4) cause of death or injury; and (5) other pertinent information. Care will be taken in the handling of sick or injured specimens to ensure effective treatment and care, and in the handling of dead specimens to preserve biological material in the best possible state for later analysis of cause of death. In conjunction with the care of a sick or injured desert tortoise or preservation of the biological materials from a dead desert tortoise, the finder has the responsibility to carry out instructions provided by the FWS's Division of Law Enforcement to ensure that evidence intrinsic to the specimen is not unnecessarily disturbed. (From Biological Opinion - Terms and Conditions, item 6f, page 73).

QST and an authorized biologist will prepare a report to be distributed to FERC, BLM, the FWS, and CDFG no later than 90 days following the completion of construction activity. The report will document the numbers and location of desert tortoises encountered, their disposition, effectiveness of mitigation measures, practicality of mitigation measures, recommendations for future mitigation measures that allow for

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better protection or more workable implementation, and an estimate of acreage disturbed. (From Biological Opinion - Terms and Conditions, item 6i, page 73).

Significance After Mitigation: Less than significant (CEQA Class 3)

Documentation Required: Documentation from required onsite monitoring and reporting by the Environmental Inspector, demonstrating adherence to mitigation measures detailed in the Mitigation Monitoring Plan, in appendix E-1 of the EIS/R, and in the FWS Biological Opinion (BO).

Responsible Agency: FERC, FWS, CDFG, CSLC

CEQA Mitigation Number: T&E 3

Impact Reference: Threatened or Endangered Species

Construction in or near southwestern willow flycatcher habitat during the breeding season could impact nesting birds.

Significance Before Mitigation: Significant (CEQA Class 2)

Mitigation: QST will avoid construction at the Beaumont Compressor Station, and all other locations with potential habitat where birds are present during surveys, during the breeding season (May 1 through August 15).

If construction must occur during the breeding season, QST will conduct surveys according to FWS protocol, prior to construction. If no southwestern willow flycatchers are present at a site, construction could proceed. If the species is present, QST will suspend construction at the site(s) until after the breeding season or until the FERC staff reinitiates and completes consultation with the FWS.

Project-committed mitigation measures are provided by QST (see section 5.5.2 and appendix E-1).

Additional surveys may be required, as discussed at the end of section 5.5.2.1, Federally Listed Species.

At Milepost 109.72, construction activities will not occur during the nesting season for the southwestern willow flycatcher (May 1 through September 1). No construction within Big Morongo Canyon will occur between March 15 and September 15. (From Biological Opinion - Proposed Minimization Measures, item 24a, page 23).

Compensation for the area disturbed will be made by restoring another area of potential southwestern willow flycatcher or least Bell's vireo habitat along the same riparian area at a 2:1 ratio (10,000 square feet). The area to be restored will be chosen with the approval of BLM (Robin Kobaly) and the FWS, and will be near the area that is

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disturbed by the work. The restoration plan will consist of native riparian species and be approved by BLM (Robin Kobaly) and the FWS, with the same success criteria as outlined in FERC'S Wetland and Waterbody Construction and Mitigation Procedures. (From Biological Opinion - Proposed Minimization Measures, item 24m, page 26).

Significance After Mitigation: Less than significant (CEQA Class 3)

Documentation Required: Documentation from required onsite monitoring and reporting by the Environmental Inspector, demonstrating adherence to mitigation measures detailed in the Mitigation Monitoring Plan, in appendix E-1 of the EIS/R, and in the FWS Biological Opinion (BO).

Responsible Agency: FERC, FWS, CDFG, CSLC

CEQA Mitigation Number: T&E 4

Impact Reference: Threatened or Endangered Species

Construction in or near coastal California gnatcatcher habitat during the breeding season could impact nesting birds.

Significance Before Mitigation: Significant (CEQA Class 2)

Mitigation: QST will avoid construction at the Beaumont Compressor Station and excavation sites within coastal sage scrub habitat, and all other locations with potential habitat where birds are present during surveys, during the breeding season (February 15 through August 15).

QST will survey excavation sites within coastal sage scrub habitat prior to the onset of construction activity according to FWS and CDFG guidelines. In addition, QST will consult with the CDFG to determine whether mitigation is required under the CESA or other applicable regulations for disturbance to the coastal sage scrub habitat at the excavation sites.

If surveys indicate no coastal California gnatcatchers are present, and appropriate habitat mitigation requirements are fulfilled, construction could proceed. If this species is found in any project area, QST will suspend construction activity at the site until the FERC staff reinitiates and completes consultation with the FWS.

Project-committed mitigation measures are provided by QST (see section 5.5.2 and appendix E-1).

Additional surveys may be required, as discussed at the end of section 5.5.2.1, Federally Listed Species.

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Because of potential noise disturbance to nesting gnatcatchers, QST will avoid construction work at the Beaumont Compressor Station during the breeding season for the gnatcatcher (February 15 through August 15). If construction must be conducted during the breeding period, QST will survey the area according to FWS protocol. The presence of gnatcatchers at the site will require that QST suspend construction at the Beaumont Compressor Station until the FERC staff reinitiates and completes consultation with the FWS. (From Biological Opinion - Proposed Minimization Measures, item 27, pages 26 and 27).

Prior to initiating construction activities, QST shall survey 16 previously un-surveyed excavation sites within coastal sage scrub habitat according to the FWS and CDFG guidelines. If gnatcatchers are found in any project area, QST will suspend construction activity at the site until the FERC staff reinitiates and completes consultation with the FWS. (From Biological Opinion - Proposed Minimization Measures, item 28, page 27).

Questar shall consult with CDFG to determine whether site-specific mitigation is required under the California Endangered Species Act or other applicable regulations for disturbance to the coastal sage scrub habitat. (From Biological Opinion - Proposed Minimization Measures, item 29, page 27).

Mitigation for the coastal California gnatcatcher will focus on the avoidance of potential habitat during the breeding season, if preconstruction surveys or on-site observations indicate the presence of this species. Non-emergency project construction activities will be restricted in coastal California gnatcatcher habitat between March 1 and September 1. A buffer of 300 feet will be established in coastal sage scrub habitat, if birds are present. (From Biological Opinion - Proposed Minimization Measures, item 30, page 27).

All encounters with listed species will be reported to the authorized biologist. For gnatcatcher encounters, the following information will be reported: (1) Location; (2) date and time of observation; and (3) response of bird to activity. (From Biological Opinion - Terms and Conditions, item 6b, page 71).

Significance After Mitigation: Less than significant (CEQA Class 3)

Documentation Required: Documentation from required onsite monitoring and reporting by the Environmental Inspector, demonstrating adherence to mitigation measures detailed in the Mitigation Monitoring Plan, in appendix E-1 of the EIS/R, and in the FWS Biological Opinion (BO).

Responsible Agency: FERC, FWS, CDFG, CSLC

CEQA Mitigation Number: T&E 5

Impact Reference: Threatened or Endangered Species

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Construction in or near least Bell's vireo habitat during the breeding season could impact nesting and foraging birds.

Significance Before Mitigation: Significant (CEQA Class 2)

Mitigation: QST will avoid construction at the Beaumont Compressor Station and the excavation site at MP 109.72 during the breeding season (March 1 through August 15) for the least Bell's Vireo. If construction must be conducted at these sites during the breeding season, QST will survey these areas according to FWS protocol. If no least Bell's vireos are present at the site, construction could proceed, depending on the results of other required surveys. If the species is present, QST will suspend construction at the site(s) until the end of breeding season or until the FERC staff reinitiates and completes consultation with the FWS.

Project-committed mitigation measures are provided by QST (see section 5.5.2 and appendix E-1 of the EIS/R).

At Milepost 109.72, construction activities will not occur during the nesting season for least Bell's vireo (March 15 through September 15). No construction within Big Morongo Canyon will occur between March 15 and September 15. (From Biological Opinion - Proposed Minimization Measures, item 24a, page 23).

Compensation for the area disturbed will be made by restoring another area of potential southwestern willow flycatcher or least Bell's vireo habitat along the same riparian area at a 2:1 ratio (10,000 square feet). The area to be restored will be chosen with the approval of BLM (Robin Kobaly) and the FWS, and will be near the area that is disturbed by the work. The restoration plan will consist of native riparian species and be approved by BLM (Robin Kobaly) and the FWS, with the same success criteria as outlined in FERC'S Wetland and Waterbody Construction and Mitigation Procedures. (From Biological Opinion - Proposed Minimization Measures, item 24m, page 26).

Significance After Mitigation: Less than significant (CEQA Class 3)

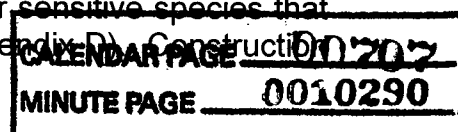
Documentation Required: Documentation from required onsite monitoring and reporting by the Environmental Inspector, demonstrating adherence to mitigation measures detailed in the Mitigation Monitoring Plan, in appendix E-1 of the EIS/R, and in the FWS Biological Opinion (BO).

Responsible Agency: FERC, FWS, CDFG, CSLC

CEQA Mitigation Number: T&E 6

Impact Reference: Threatened or Endangered Species

The project could affect a total of 33 threatened, endangered, or sensitive species that could occur in California wash habitats (see section 4.5 and appendix D).



activities could result in disturbance of habitat, displacement of individuals, or other impact on these species.

Significance Before Mitigation: Significant (CEQA Class 2)

Mitigation: Project-committed mitigation measures are provided by QST (see section 5.5.2 and appendix E-1 of the EIS/R). Additional surveys may be required, as discussed at the end of section 5.5.2.1, Federally Listed Species.

See conditions 28 through 36 in chapter 7.0 of the EIS/R.

All of the mitigation measures set forth in all preceding Threatened or Endangered Species Impact References (CEQA Mitigation Numbers T&E 1 through T&E 5), as well as the following Impact Reference (CEQA Mitigation Number 7) are designed to protect threatened, endangered, and sensitive species that could occur in California wash habitats.

Significance After Mitigation: Less than significant (CEQA Class 3)

Documentation Required: Documentation from required onsite monitoring and reporting by the Environmental Inspector, demonstrating adherence to mitigation measures detailed in the Mitigation Monitoring Plan, in appendix E-1 of the EIS/R, and in the FWS Biological Opinion (BO).

Responsible Agency: FERC, FWS, CDFG, CSLC

CEQA Mitigation Number: T&E 7

Impact Reference: Threatened or Endangered Species

Construction activities in or near arroyo toad habitat could affect or result in takes of arroyo toads.

Significance Before Mitigation: Significant (CEQA Class 2)

Mitigation: An authorized biologist will inspect the construction area for Mileposts 98.32 and 98.89 immediately prior to any construction activity. Prior to any construction activity, an authorized biologist will conduct an education session for personnel involved in the project. If any arroyo toads are found during the preconstruction inspection or during construction, the qualified biologist will relocate the toads out of the project area and into nearby suitable habitat. As part of the project report, the qualified biologist will provide documentation of the number of arroyo toads, if any, removed from the project area, date and time of capture, specific location of capture, approximate size and age of individuals, and description of relocation sites. (From Biological Opinion - Proposed Minimization Measures, item 26, page 26).

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Within arroyo toad habitat: open pipeline trenches, auger holes, or other excavations greater than 1-foot deep will be inspected by an authorized biologist once in the morning before construction begins for the day, periodically throughout the day, once at the end of the day, and immediately prior to backfilling. Pipe segments will be capped or closed each night. Such pipe segments will be inspected regularly before sealing. For open trenches, earthen escape ramps with 2:1 or lesser slopes will be maintained at least every 0.25 mile along open trenches and at each end. Other excavations that remain open overnight will be covered or ramped to prevent entrapment of wildlife. If QST determines that covering such excavations is not practicable, such excavation sites shall be completely enclosed with temporary tortoise-proof fencing. (From Biological Opinion - Terms and Conditions, item 4, page 70).

Within arroyo toad habitat:

No equipment maintenance, such as adding fuel, oil, coolant, or any other such activities, shall be allowed within 300 feet of the stream channel. No construction equipment will be authorized off the designated access routes or staging areas. Material stockpiling, equipment storage, and vehicle parking will be permitted only in areas of prior disturbance, to be approved by the Service and CDFG. (From Biological Opinion - Terms and Conditions, item 5a, page 71).

Exclusion fencing (e.g., silt fencing) will be installed around the site perimeters for Mileposts 98.32 and 98.89 if construction continues past 1 day, to prevent movements by toads into the construction site during the night. (From Biological Opinion - Terms and Conditions, item 5b, page 71).

At Mileposts 98.32 and 98.89, the top 1 foot of topsoil will be segregated during excavation, and following repair of the pipe, shall be replaced on the surface in its original location. (From Biological Opinion - Terms and Conditions, item 5c, page 71).

No work will begin at Mileposts 98.32 and 98.89 within 3 days following rain, to decrease the likelihood of encountering active toads. (From Biological Opinion - Terms and Conditions, item 5d, page 71).

Significance After Mitigation: Less than significant (CEQA Class 3)

Documentation Required: Documentation from required onsite monitoring and reporting by the Environmental Inspector, demonstrating adherence to mitigation measures detailed in the Mitigation Monitoring Plan, in appendix E-1 of the EIS/R, and in the FWS Biological Opinion (BO).

Responsible Agency: FERC, FWS, CDFG, CSLC

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EXHIBIT F

STATEMENT OF OVERRIDING CONSIDERATIONS

CEQA requires lead agencies to balance the benefits of a project against its unavoidable environmental risks in determining whether to approve the project. If the benefits of the project outweigh the unavoidable adverse effects, those effects may be considered "acceptable" (State CEQA Guidelines Section 15093[a]). CEQA also requires, however, that where a lead agency decision allows the occurrence of significant effects that are not at least substantially mitigated, the agency shall support in writing the specific reasons for its action. Such reasons must be based on substantial evidence in the EIS/R or elsewhere in the administrative record (State CEQA Guidelines Section 15093[b]). This required statement is referred to as a Statement of Overriding Considerations.

The following adverse impact of the project is considered, based on the Final EIS/R and other information in the record, significant and unavoidable:

GEO 3 - (Geologic Hazards) — Earthquakes in California could potentially damage the pipeline, however, design standards minimize the risk.

DISCUSSION

Potential geological and seismic hazards as identified in the FEIR/S could damage pipelines, potentially resulting in significant impacts on the environment. In compliance with Condition 12 of the FEIS/R, Questar has completed and submitted its Seismologic Hazards Evaluation and Mitigation Plan, dated November 17, 2000, for the Southern Trails Pipeline Project to the CSLC and FERC. This Evaluation and Plan were reviewed by CSLC's engineering staff, in conjunction with ENSR and the staff of the California Department of Conservation's Division of Mines and Geology. As a result, pipeline system modifications and mitigation measures, designed to reduce the potential impacts of a seismically induced pipeline accident on public safety to the maximum extent practicable, have been required of and incorporated into the project by Questar.

These changes are:

- Nine seismically qualified automatic shut-down valves (ASDV), will be strategically located in consideration of identified fault zones and known landslide areas to reduce gas blow-down times in the event of a pipeline accident in the populated areas of Southern California.
- Increased pipeline wall thickness is designated for new pipeline segments, particularly in seismically active areas;
- Smart-pig internal inspection of the pipeline from the Twenty-Nine Palms Station (MilePost [MP] 141) to the western terminus of the pipeline, will be performed no later than the third year of pipeline operation.

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Even though the pipeline is designed to the best available engineering standards in consideration of all identified active fault crossings, the possibility of pipeline rupture as a result of fault displacement during an earthquake cannot be completely eliminated. While the mitigation measures would substantially reduce the impact, potential risk would remain, since complete elimination of all hazards is not guaranteed.

The following project-specific economic, technological or other benefits outweigh the unavoidable potential risk to public safety defined in GEO 3 such that the impact defined in GEO 3 is considered "acceptable":

1. The project would provide additional pipeline transportation capacity necessitated by increased demand in southern California and the southwest United States. According to the California Energy Commission (CEC), California's energy system is dependent on two primary fuels – petroleum and natural gas. For over a decade, natural gas has supplied more than 30% of the State's Energy demand. Approximately 60% of this gas is used in Southern California. Due to its price, clean-burning characteristics and fuel efficiency, "...natural gas has become the fuel of choice within California, particularly for electricity generation, and is expected to grow in the coming years. Almost 87% of California's natural gas supplies are obtained from outside the State – almost 39% from the U.S. Southwest, 34% from Canada and 14% from the Rocky Mountain area."(California Energy Facts, CEC, March 1999)

CEC's staff report, "California Energy Demand 2000-2010,"(July 18, 2000) projects that energy conservation would reduce generation requirements by 11.4% by the end of this period. Solar and wind energy contribute less than 1% to energy generated in California. Geothermal and organic waste sources generate 6.6%.

During the next two decades, natural gas is expected to play a key role in achieving California's environmental objectives, particularly air quality. One-third (33%) of the State's electrical energy is generated by gas. That amount is projected to rise 5% to 38% by 2009. The CEC's comprehensive projections, factoring into its equation all energy sources, including conservation, the energy production efficiency of the mix of fuel and renewable sources, are reflected in the resultant projection.

Meeting the State's natural gas demand will require, according to the CEC, expansion of existing transportation capacity by 586 MMcfd by 2004 and approximately 1,000 MMcfd by 2019. The CEC concludes that new pipelines from the Southwest will be required to provide the required natural gas.

2. The increase in natural gas supplies due to this project would reduce end users' reliance on other fossil fuel energy sources, thereby indirectly reducing associated air quality impacts.
3. Pipelines represent the safest method of transporting large volumes of natural gas compared to other modes of transportation. Based on the most recent available data from the Department of Transportation (1998; DOT) for all transportation-related deaths, highways transportation had the highest number of fatalities (41,480 or 96%), followed by marine (908 or 2.0%), railroad (831 or 1.8%), aviation (683 or 1.6%), and all types of pipelines (18 or 0.04%). In contrast, natural gas pipelines accounted for 1 fatality or 0.002% of all transportation-related deaths. Moreover, based on the most current available DOT and Energy Information Administration

data (1988 to 1998), the number of natural gas transmission pipeline accidents in the US has decreased 30%, even though the amount of natural gas use has actually increased 22%. Thus, alternative modes of transportation of large volume of natural gas pose a greater potential hazard and the safety record of natural gas pipelines has improved over time.

4. The project would increase competition for supplying natural gas to markets in the southwestern US. Increased competition could result in lower prices to consumers, slower price increases, or simply a more assured gas supply.
5. Local economies would benefit financially from the projects by implementation of a license fee or other mechanism for use of the right-of-way. There will be short-term financial benefits to workers from construction and operation employment and to businesses by supplying fuel and construction materials for construction.